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FUTURE OF THE HIGHWAY PROGRAM



HEARINGS
BEFORE THE
COMMITTEE ON TRANSPORTATION
OF THE
COMMITTEE ON PUBLIC WORKS
UNITED STATES SENATE
NINETY-FOURTH CONGRESS
FIRST SESSION

JULY 18, 21, 24, 28, 29, 30, AND 31, 1975—WASHINGTON, D.C.

SERIAL NO. 94-H22

PART 2

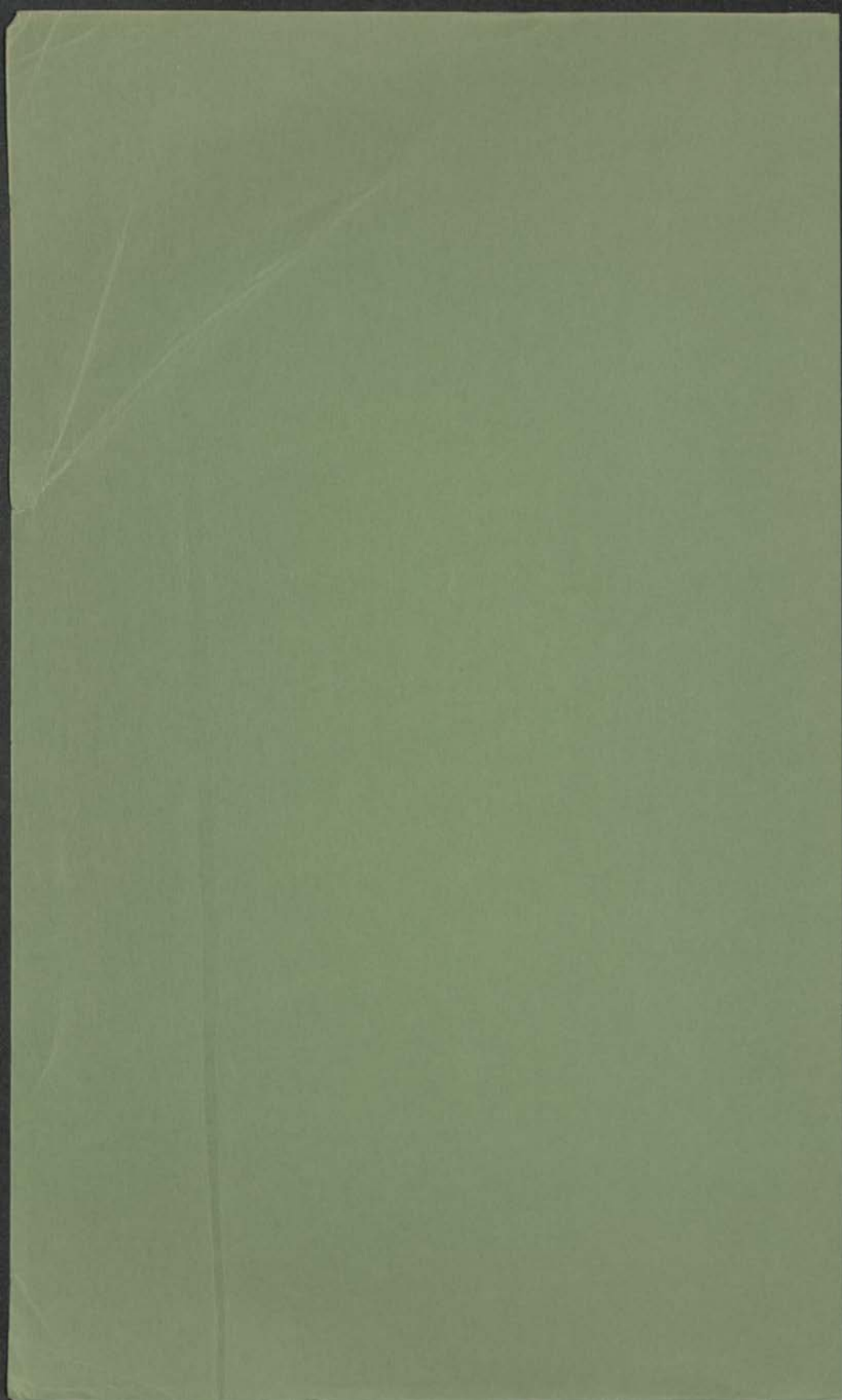
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FUTURE OF THE HIGHWAY PROGRAM

URBAN TRANSPORTATION

FRIDAY, JULY 18, 1975

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION,
Washington, D.C.

The subcommittee met at 9:30 a.m., pursuant to recess, in room 4200, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee) presiding.

Present: Senators Bentsen, Stafford, and Domenici.

Senator DOMENICI [presiding]. The committee will please come to order.

We want to try to expedite the hearings. We want everyone that is on the schedule to have an opportunity to testify, but we also want to have time to discuss with the other panel members and myself, the issues. The way I plan to handle it is to call each one of the witnesses, one at a time, let them make their brief observations and remarks; call the next witness; and proceed in this way through the four main witnesses. Then we will call the contributing panel members up. Then we will discuss it among ourselves.

Those following Mr. Davis would be Mr. Bridwell, Mr. Gambaccini, Mr. Milton Pikarsky, Mr. Stokes, then the contributing panel members, Les Lamm—is Les here—and Kenneth Orski.

Mr. ORSKI. I am here.

Senator DOMENICI. Would you like to open this morning, Mr. Davis?

STATEMENT OF AUBREY DAVIS, JR., COUNCIL MEMBER, MERCER ISLAND, WASHINGTON, REPRESENTING THE NATIONAL LEAGUE OF CITIES

Mr. DAVIS. Thank you, sir.

Mr. Chairman, members of the subcommittee, I am Aubrey Davis, Jr., council member of the Municipality of Metropolitan Seattle (METRO) and Chairman of Metro's Transit Committee. I am also an elected member to the city council of Mercer Island, Wash., and serve as a member of the Transportation Steering Committee of the National League of Cities.

Let me begin by thanking the subcommittee on behalf of the National League of Cities and the U.S. Conference of Mayors for the opportunity to place on record the views of the Nation's cities on the "Transportation Problems of Urban America."

As most of you are well aware, the National League of Cities represents approximately 15,000 municipalities through a combination of direct membership and a network of State municipal leagues. The U.S. Conference of Mayors is the national spokesman for virtually all cities with a population in excess of 30,000, as represented by their elected chief executives.

The subcommittee should be commended for the innovative approach being utilized for this hearing. By setting aside individual days for a specific topic and incorporating a panel discussion format, the subcommittee has broadened the scope on the highway legislative debate and has guaranteed a maximum amount of input into the legislative process.

Since the National League of Cities and the U.S. Conference of Mayors will also be represented on July 24 to discuss the Federal role in the highway program, my statement has focused directly on the objectives of the 1973 Highway Act, the experience encountered in the implementation to date and specific solutions now considered necessary to better achieve those objectives and assist urban areas in meeting their own specific transportation priorities and needs.

Specifically, I will address three major provisions from the 1973 Highway Act, the planning process, the Federal-aid urban systems program, both its extension and increased flexible use, and the withdrawn interstate substitution program.

PLANNING

The 1973 Federal Highway Act made two contributions in the area of urban transportation planning. It provided that one-half percent of the funds authorized to be appropriated for the Federal-aid systems shall be available for carrying out the "134 planning process." In addition, it said these funds, apportioned to the States, shall be made available to the "metropolitan planning organization designated by the States." These provisions were strongly supported by the cities and long overdue.

Prior to 1964, there was no legislative requirement for State highway officials to discuss plans and priorities with local government officials in charge of comprehensive land-use and transportation planning in the region. Numerous decisions on the locations of highways were made at the expense of local planning objectives.

As a result, the 1964 Federal-Aid Highway Act established the section 134 planning provision. This required that highway plans be properly coordinated with other forms of transportation and that due consideration be given to their effect upon the future development of urban areas. It also provided that after July 1975, highway projects in urbanized areas would only be approved if based upon comprehensive transportation planning. These activities were to be financed from the traditional 1½ percent research and planning funds authorized in section 307 of title XXIII.

Prior to and following this time, the Department of Housing and Urban Development and the Urban Mass Transportation Administration were providing funds to finance regional planning agencies. By 1973, in half of the urbanized areas, the 134 agencies and the transit planning agencies were under the same roof; but in the other half, they were separate organizations limiting the possibility for proper coordination.

Thus, the 1973 amendment provided the basis for the Secretary of Transportation to direct the Governors to designate a single planning agency in all urbanized areas that would be the recipients of highway and mass transit planning funds. Unified work programs are now being prepared and carried out. We are glad we are here, but in retrospect, it seems incredible that it would take 11 years to bring highway, transit, and land-use planners together.

Prior to the 1973 amendment, about 20 million of the 1½ percent funds were being used to finance the 134 planning process. With the enactment of the one-half percent funds, almost all of the 1½ funds were returned by the States—this in the face of the added responsibility of the expanded urban system programs.

FEDERAL-AID URBAN SYSTEMS PROGRAM

The urban system program was created by the 1970 Federal-Aid Highway Act as a small first step toward making Federal funds available for construction work on city streets. The 1973 Highway Act significantly increased the annual funding level for the FAU program from \$100 to \$800 million.

The legislative intent in the expansion of this program, as stated in the committee report, was to help cities by including routes providing for the collection and distribution of traffic. It was to fund projects never before eligible for Federal aid.

Although 50 percent of the Federal gas tax revenue is generated in urban areas, historically, the Federal-aid highway program had not provided funds to these areas to meet their growing transportation needs. Prior to the urban system program, only sections of State primary and secondary routes which extended through cities were eligible for Federal funds.

Even with the inception of the urban system, only 11 percent of streets and highways in urban areas were eligible for Federal aid, while 25 percent of rural roads were eligible. In 1973, for example, 2,192 miles of urban streets and highways had Federal-aid construction projects, as compared to 27,146 miles in rural areas.

But let us briefly look at the location of the most heavily traveled roads. Of all noninterstate roads carrying 30,000 or more vehicles per day, only 68 miles are in rural areas, while 1,347 miles are in urban areas. In the 15,000- to 29,999-vehicles-per-day category, 976 miles are in rural areas and 7,762 miles are located in urban areas. Clearly, urban America has a critical need for Federal highway assistance which has not and is not being met.

Although the increased urban system authorization beginning in fiscal year 1974 could only meet a fraction of this need, it was met with great anticipation by cities. Yet, the experience of the past 2 years has been discouraging. Of the \$1.78 billion authorized under the urban system program for fiscal years 1972 through 1975, only \$635 million had been obligated as of May 31.

Senator DOMENICI. How much was obligated again?

Mr. DAVIS. \$635 million, out of the available sum of \$1.78 billion, just about one-third.

The staff of the National League of Cities and the U.S. Conference of Mayors has begun a study of the implementation of the urban system program. They have found that the program has failed not

only because the funds authorized have not been obligated—even where the money has been obligated, the intent of the law to provide funds to address local needs and priorities has often been violated.

The key problem area is the role of the State highway department. The State, under law, apportions the funds to the organized areas and must approve all local programs and projects before they are forwarded to the Federal Highway Administration for obligation. But the State has taken on an added role, that of a competitor for urban system funds.

The State's veto power puts it in a unique and favored position in the programming of local funds; it can demand that its projects be funded regardless of local priorities. Some States have redesignated Federal-aid primary routes—those which are covered under the urban extensions program—as Federal-aid urban routes. Thus, construction on these routes can be performed with FAU, not primary system money.

Another problem area is the excessive redtape at both the State and Federal levels. The objective of the 1973 Act to minimize redtape has not been met. Cities which have developed considerable expertise over the years during which they had to do all of their road construction and reconstruction without Federal dollars, now find that they must comply with a myriad of time-consuming and costly administrative procedures and requirements.

The cities object to the large local investment of funds required to bring projects to a state of readiness to compete for uncertain FAU funding. State and Federal inflexibility forces them to comply with procedures, regulations, and construction specifications which do not reflect the realities of urban streets and highways.

The local areas know why the current Federal-aid urban system program is not working, and they know how it can be improved to better meet their needs and priorities. First of all, there should be one expanded program for urban transportation assistance under the Highway Act. We commend the administration for proposing such a consolidation.

It would help end the current efforts by the States to finance urban extension projects out of funds intended for city streets. But, obviously, the authorization for such an expanded category must be large enough to meet the increased demands. Presently, annual authorization levels for the urban system and urban extension programs equal \$1.1 billion. In order to adequately reflect the toll of inflation over the past 2 years and begin to meet the needs of the cities, a minimum annual level of \$1.5 billion is necessary. We also vigorously object to the administration proposal to limit the mandated pass-through for the large urban areas to 75 percent of the entitlement. These areas need all of their entitlement.

Cities must also have the flexibility to decide how to best meet their comprehensive transportation needs. Most importantly, urban areas need direct apportionment of Federal highway funds, along with local program control. As long as the State retains the power to apportion the funds and approve all projects, local governments will not have the ability to most effectively meet their own transportation needs.

Arguments have been raised in the past that there is no responsible method for directly apportioning highway funds to urban areas.

We believe that the experience with the implementation of the new section 5 formula grant program for mass transit shows that it can be done.

This new formula grant program was enacted by a law signed by the President on November 26, 1974. The regulations implementing this new section were issued on December 26, 1974. This provided the funds to be apportioned to a "designated recipient" in all urbanized areas over 200,000 population.

By March 1, 1975, all of these urbanized areas had agreed on a mechanism at the regional level to receive their funds and redistribute them. For the remainder of the urbanized areas below 200,000, the moneys were apportioned to the States, which act as designated recipients for these smaller urbanized areas.

It is interesting to note, that of the \$300 million that was available for obligation during 1975, \$160 million was obligated. Of this, only \$1 million was obligated by the States for the urbanized areas under 200,000 population—of the \$60 million apportioned for these areas. The local areas over 200,000 obligated \$159 million of the \$240 million apportioned funds.

Even within the current urban system program, we in the Seattle urbanized area have shown that local governments can cooperate in the apportioning and programing of highway funds. We have set up a six member board representing equitably the central city—Seattle—suburban interests and Metro, the public transit operator.

The elimination of much of the redtape local governments have to wade through now would also go a long way toward increasing local control and making more effective use of our limited Federal-aid highway dollars.

The 1973 Act took a step toward reducing redtape by allowing the FHWA to certify State highway departments to process noninterstate projects. This should be expanded to allow basic design and construction engineering determinations to be made by the local government, once the responsible officials are properly qualified and certified. Local governments which do not have such capability could contract with the State to provide the technical assistance; but the work would not be duplicated.

The Federal Government should also be able to certify and accept State and local requirements for the purposes of meeting Federal requirements in areas such as environmental reviews, prevailing wages, and equal opportunity, where State and local laws and procedures are equal to or exceed Federal requirements. Local governments are not seeking to avoid such requirements; but such certification would eliminate duplication of work and unnecessary added cost.

Inflexibility by State and Federal officials has forced the use of construction specifications geared to controlled-access, high-speed highways for urban streets. More realistic urban street specifications exist which do not compromise safety, and they should be utilized.

Finally, the Federal Government should develop broad procedural guidelines and general postaudit compliance procedures under which highway funds could be effectively and efficiently utilized with the fewest administrative regulations.

Perhaps the most controversial provision of the 1973 Highway Act was the flexibility granted local governments—if the State approved—to use highway funds in the ways which best meet their comprehensive

transportation needs, including the purchase of buses and rail rolling stock and the construction of fixed rail facilities.

Here, again, the experience has been disappointing. Only about \$40 million of urban system money has been transferred to only four mass transit projects. Many of the reasons for this are found in the way the FAU program itself has been implemented as I have already described.

Prominent among them are the States' efforts to impose their priorities on local areas and institutional attitudes in the State highway departments opposed to the use of highway funds for transit purposes. For example, we are trying to install bus shelters with urban system funds. Incredibly, each one of several hundred requires submittal to the State of an individual site plan. Requirements such as this lead to a strong feeling among local officials that a transit grant directly from UMTA is much easier to secure than one using highway funds since the latter application must also go through the State highway department and FHWA.

In addition, our initial study has found legal impediments which discourage such a transfer. Most predominant is the larger local matching share—30 percent—required under the Highway Act. There was also early confusion over conflicting standards on charter bus requirements between FHWA and UMTA. Currently, there is confusion over the conflicting requirements for the utilization of transportation services by the elderly and handicapped.

Our staff did find that among almost all regional planning agencies and among many city and county public works officials there was a positive attitude toward transit projects. In several urbanized areas, a fixed percentage of the apportioned funds are intended to be earmarked for transit projects. Where this is not done, a large portion of the street and highway projects are transit related.

I want to make clear that the reason the 1973 transit transfer provision has so far been less than successful is not that local governments are not committed to multimodal transportation planning. Rather, they are being discouraged primarily by the failure of the entire urban system program to be implemented in a manner responsive to the needs and priorities. Again, the only realistic solution is direct Federal funding to local areas and local program and project control.

WITHDRAWN INTERSTATE SUBSTITUTION PROGRAM

One of the most striking provisions of the 1973 Act was the so-called interstate highway substitution provision. This provided that if a Governor and an urbanized area decided not to build an urban interstate route, the funds to be apportioned to this project could be substituted for a rail transit project or the purchase of rail or bus equipment. Actions have been taken by the States of Massachusetts and Pennsylvania for projects in Boston and Philadelphia.

Several other urban areas, including my own, have been considering option of withdrawing an interstate segment and substituting a transit project. In meetings with people from other areas, common concerns have been experienced about the provision of this program. The amount of funds available for substitution, under the present law, is based upon the 1972 cost estimates of the withdrawn segment.

If this is to be a viable provision, it should allow for the transferred funds to be based on the most current cost estimate. The language in the administration's proposed legislation provides for this.

Several cities have expressed their desire to withdraw an urban interstate project, but feel highway improvements in the corridor of the withdrawn interstate segment must be made. The highway improvements that are needed are lower standards than required by interstate roads. Also, immediate transit needs may not be sufficient to utilize the full amount of the substituted funds.

If the funds from the withdrawn interstate projects are available for other highway as well as transit projects, many more cities would seriously approach the option of other use. The National League of Cities and the U.S. Conference of Mayors applaud the administration for including in their proposal the more flexible use of the substituted projects.

Furthermore, the present and the proposed law compels an either/or decision. A community either builds an interstate or it requests that the segment be canceled to substitute a mass transit project. Why shouldn't the choice be broadened? Why shouldn't we be able to build an interstate and provide in the bus lanes rails and a power source for light rail or trolleys? In true multimodal planning, many communities—perhaps ours—will want both buses and light rail. Since both can use the streets and highways, we should be allowed to install rails for streetcars in exclusive bus lanes. It would be idiotic to require a separate right-of-way, tunnel, or bridge in this case. I urge that this additional flexibility in local choice be granted. It need not increase interstate cost appreciably and could provide substantially greater efficiency in transporting people.

Senator DOMENICI. Mr. Davis, you indicated that the league had begun a rather detailed inquiry of the cities with reference to the prior section you discussed. Now you are saying that the substituted project is not working well, and you have only described a couple of reasons.

Might I ask, is the league prepared to give us an indepth analysis of projects where the substituted project approach—as strict as it is—has caused the city not to be able to make a changeover?

Mr. DAVIS. I think we can prepare a statement on that, sir.

Senator DOMENICI. I think it would be very important, especially if something formal was submitted where it was not an exact one for one, but had some other kind of transportation attached and for that reason, it was turned down.

Mr. DAVIS. I think the turndown has not occurred on the Federal level. Communities shy away from things they might otherwise do. The new law does have broader provisions which we commend, but it doesn't contain this last thing I am talking about which would greatly improve the flexibility of local choice. It is something of a relatively new concept, but may be well useful.

Senator DOMENICI. On that score, with your league and Conference of Mayors staff, it might be well if you could develop a portfolio of projects that would have been submitted that were multimodal in nature, but weren't submitted because obviously the regulation is staring you right in the face. If the league had a few examples of that, it would be extremely helpful.

Mr. DAVIS. I think we could do that, sir.

Finally, I would like to comment on the availability of the funds for obligation. The present law has been interpreted to say that the funds for the withdrawn segment would be made available for obligation through June 30, 1981. This means that if an interstate project is withdrawn during fiscal year 1976, the funds to be obligated for the substitute transit project would be spread over the next 6 fiscal years. If the transit project was ready to go, as is the case here in the Washington area, it would make no difference.

We feel that once an interstate project is withdrawn and the intent is to build a transit project, 90 percent of the current estimated cost of that interstate project should be made available for immediate obligation. The applicants for the transit project must justify it and prove it can in turn use the funds, but they should not be held back by the schedule of the interstate program.

Again, we commend the administration for including such a provision in their proposed bill. We understand this provision caused a great deal of agony before it was approved. This is understandable; the effects of this decision can mean the immediate availability of \$4 to \$5 billion of contract authority for the mass transit program. President Ford and Secretary of Transportation Coleman are to be congratulated.

In closing, mayors and local elected officials are fully conscious of the myriad of transportation problems which exist in their cities. They also fully understand that an efficient, comprehensive transportation system is part and parcel of maintaining and, in some instances, restoring the vitality of their cities. I believe that the capacity exists in the cities to not only identify and address the problem but to develop and implement solutions.

I would hope that as this subcommittee begins its discussions to develop new legislation, it will seriously consider and entertain provisions which would address the following objectives: Direct funding to general purpose local governments; program consolidation; increased flexibility and adequate funding levels.

Thank you for your attention.

Senator DOMENICI. I assume you, as a representative of the league, don't have any information as to whether or not on the UMTA program which is direct, there are hangups after it has been allocated that are serious there? There is still one further step, that is to get something done. You are just comparing the authorization with approving of a project.

Mr. DAVIS. We are convinced that the amount of redtape is substantially less with transit procedures than the highway process which over the years has incurred a lot of individual steps and checks.

Senator DOMENICI. You are saying if there are hangups in getting something of a mass transit project accomplished, it is not the redtape that tangles matters?

Mr. DAVIS. At least not to the same extent.

Senator DOMENICI. Thank you, very much.

We will go on to the next witness; then you will be exchanging with them.

Mr. Bridwell, if you will proceed.

STATEMENT OF LOWELL K. BRIDWELL, PRESIDENT, SYSTEM
DESIGN CONCEPTS, INC.

Mr. BRIDWELL. Mr. Chairman, I appreciate this opportunity to appear before you to discuss national transportation policy with an emphasis at today's hearings on problems of urban transportation.

For the record, my name is Lowell K. Bridwell. I am president of System Design Concepts, Inc., a transportation and public administration consulting firm. I previously have held several government positions, including Federal Highway Administrator and Deputy Under Secretary of Commerce for Transportation, prior to the creation of the U.S. Department of Transportation.

I believe it is particularly appropriate for this subcommittee to be holding this set of wide ranging hearings on national transportation policy problems. My remarks today will be limited to transportation problems of urban America as requested by the subcommittee.

The Congress made significant progressive steps to aid urban transportation through the Highway Act of 1973 and the Urban Mass Transportation Assistance Act of 1974. While they were far-reaching in many respects, major national events have overtaken the intended policy thrust of the legislation and the programs and funds made available by those acts simply do not respond to today's needs and the needs which can reasonably be foreseen in the near future.

The modern Federal highway program dates from 1956 when the highway trust fund was created, the interstate system was started, and added funds were made available for other highways on the Federal-aid systems. The program has been revised in several significant ways in subsequent acts. Federal involvement in urban public or mass transportation dates from the Housing Act of 1960, but significant involvement in both the amount and use of funds started in 1964.

The major policy breakthroughs, however, occurred in the Highway Act of 1973 and the Urban Mass Transportation Assistance Act of 1974. While those acts had many important features, by far the most important are the policies which recognize that highway funds can be used for public transportation and that public transportation funds can be used for operating as well as capital costs.

Stated another way, those acts by Congress took a major step toward the obvious and ultimate policy that our programs and our public funds should be directed toward the movement of people and goods safely, efficiently, and conveniently at the lowest cost consistent with national objectives, including the efficient utilization and conservation of the Nation's resources, regardless of the mode of transportation.

The public debate—heated, emotional, and largely unproductive—has been going on for 15 years; during that time, we have pitted highways and automobiles against buses, rail transit, and other forms of mass transportation. It is long past time to stop this ridiculous debate.

Congress can do it this year by enacting legislation which combines Federal urban transportation policies, programs, and funding into one cohesive policy which is consistent with what Congress already has declared to be the national policy in its declaration of purpose in the Department of Transportation Act of 1966.

First and foremost, this means reconstituting the highway trust fund into a transportation trust fund which, at least initially, finances urban area transportation assistance programs as well as intercity highway and passenger transportation.

Hopefully, Congress will take the long range policy view that it also must systematically bring cohesion and consistency to other federally aided transportation programs, including railroads, airways and airports, maritime, inland waterways and other capital and operating programs. But that is too big a bite to chew in 1 year.

What is possible and manageable is to bring order and progress to our highway and public transportation programs, particularly as they relate to urban areas. Let me address quite candidly the fear among some segments of the public, and the hope in other segments, that highway construction and the continued use of motor vehicles is a thing of the past. That is not possible for as long as anyone can see.

For more than 25 years, we have experienced and we continue to experience the dispersion of residences and businesses in our metropolitan areas. This has produced a great diffusion of origins and destinations for both person and goods trips—and frankly, those diffused trips are served most efficiently and conveniently by motor vehicle.

Between 1960 and 1970, population increased in our metropolitan areas by nearly 17 percent, but less than one-tenth of 1 percent of that increase was in our central cities. We are very familiar with the fact that residential growth largely has been in the suburbs. We are completely familiar with the fact that most of the growth in retail sales has been in the suburbs as represented by our large shopping centers.

Both job producing and consumer-oriented business also has dispersed into the suburban and exurban parts of our metropolitan areas. This again shows up in the fact that between 1960 and 1970, the number of daily work trips which both started and ended completely outside to central cities increased by 3.6 million daily.

There is every indication that this dispersion phenomenon is continuing. A U.S. Census study for the Economic Development Administration found that the new or expanded plant locational preferences were overwhelmingly in the suburban and rural areas. Their preferred location was in the suburban and rural areas. Only 6 percent preferred central city locations.

This is not surprising when you look at the fact that 83 percent of the firms said they needed from five to more than 20 acres for new or expanded plant sites. It is important to note that those manufacturing firms interviewed said that they viewed close proximity to good highway facilities as the single most important criterion in plant location.

Thus, when we look at the dynamic world around us, it is not just the continued expansion of suburban and exurban residences that we must consider, but also the widely diffused dispersion of retail business and job producing commercial and industrial activities.

By the same token, it is critically important from both an energy and environmental standpoint to handle as many person trips with public transportation as can be accomplished by a rigorous policy of public transportation improvement and automobile constraint.

The Office of Technology Assessment has just completed a study of mass transportation and its relationship to the energy problem and to

the depressed state of the economy. A summary report of the study, entitled "Energy, the Economy, and Mass Transit," has been submitted to the Senate Appropriations Subcommittee on Transportation. I would like also to submit a copy of the summary report for the record of these hearings.

Senator DOMENICI. It will be admitted.

[The report appears at p. 1010.]

Senator DOMENICI. Can I stop you there and ask you a question? You have given all of the negative aspects of sprawl as you see them as they are related to transportation, and use of energy.

Is it inherent in the reverse policy, the policy of trying to move away from the single-family dwelling? Does it follow naturally that that style of life must be abdicated to accomplishment of the ends you seek?

Mr. BRIDWELL. Not if you define it as a single-family dwelling. I think the pure economics of residential construction and homeownership is such that the typical suburban development of a single-family detached dwelling on a lot of a half-acre or more as we experienced after World War II is a thing of the past.

People simply can't afford it. It is quite general now that a single detached house on a reasonably fair-sized lot costs well in excess of \$50,000. When you get residences in that kind of price range, then you are limiting the availability of residences to a small share of the market.

The consequence of this is what we actually see in the market today; that is, developments of row houses or townhouses or other kinds of specific design configurations which make more efficient utilization of space. This along with decreasing family size and many other factors are going into a different kind of residential development now.

But simply because personal income continues to increase, which is desirable from a national policy standpoint, I think that single-family dwellings as units of living space will continue to expand.

Senator DOMENICI. Thank you.

Go ahead and proceed.

Mr. BRIDWELL. Referring again to the Office of Technology Assessment, the study results, contained in the summary report, produced further evidence that there is not a one-to-one relationship between the use of automobiles and transit. In other words, eliminating an automobile trip by one of several means does not automatically translate into an additional transit patron.

By the same token, promoting additional use of transit—our current national policy—does not eliminate a significant percentage of person trips by automobiles. However, one of the most important findings contained in the report is that the combination of public investment in capital and operating costs for mass transportation and the selective application of constraints on the use of automobiles can produce significant increases in transit ridership and decreases in automobile use.

The payoff in national policy terms is quite clear. The amount of petroleum energy saved by a combined policy is in the range of a million barrels per day. Depending on the range of investment policies, transit ridership increases could range up to more than 100 percent in our urban areas and although the environmental benefits are not quantified, they obviously would be significant.

The important point is that real and measurable public benefits can be obtained by treating the means of person travel in urban areas as a comprehensive whole. The need for additional public investment in mass transportation capital facilities and rolling stock has been documented before the Congress and this committee in the past. It does not need detailed elaboration here.

What is important to understand is that the most pressing current financial need of public transportation, presently and into the future, is more funds for operating cost purposes. The emphasis of the Federal program, of course, was started exclusively on capital investment costs and only by the act of 1974 were Federal funds made available for operating costs. Clearly, operating costs are the biggest single problem in public transportation today.

It previously was mentioned that the Mass Transportation Assistance Act of 1974, for the first time, made provision for operating assistance. The amounts authorized were \$300 million for fiscal year 1975, \$500 million for fiscal year 1976, and \$650 million for fiscal year 1977. These amounts are not as great as the incremental increases in operating deficits experienced by public transportation operators in 1973 and 1974 and the operating losses projected for 1975.

The actual operating deficit for urban area public transportation operating in 1973 was \$740 million; in 1974, the operating deficit was \$1.2 billion. The projected operating deficit for calendar year 1975 is \$1.7 billion. Deficits have not been projected for 1976, but operating deficits have been increasing at a greater rate than several economic indices, including the Consumer Price Index.

Investment in highway construction and mass transportation facilities and equipment have been hit by the same inflationary spiral as the rest of our economy, and this means we are buying significantly less with the same number of dollars. The cost-price index for highway construction, for example, shows that a highway dollar buys less than one-half of what it did in 1967, just 8 years ago. While no comparable index exists for mass transportation, certain rolling stock costs have more than doubled in the same time period.

This simply means that the Federal-aid highway program has been drastically curtailed, not so much by deliberate policy as by inflation. While there have been very moderate increases in highway funding since 1967, the amounts haven't been anything close to the doubling in costs. Thus, the highway program, in terms of what the public can actually use of finished product, is only marginally over one-half of what it was 8 years ago.

By the same token, what was believed to be major financial progress in public assistance to mass transportation has been robbed by the same inflation factors and has turned out to be little more than a maintenance of effort program. Meanwhile, the national debate over energy policy continues with no consensus resolution.

If we continue current policy, automobile use will grow at 3 percent or more per year. We will fail to significantly increase mass transit ridership in our urban areas—

Senator DOMENICI. Will you start that again?

Mr. BRIDWELL. Yes. I am saying, given current policy, not just to the highway and mass transit program, but also to the present considerations of energy policy, if we continue our present policy,

automobile use will grow 3 to 4 percent per year. We will fail to significantly increase mass transit ridership in our urban areas, partially because of our use of private automobiles will not be constrained.

Given projections of present and authorized levels of funding, transit systems will be improved in amenities, but the overall extent of service provided will not change very much. Transit improvements will be just sufficient to prevent further significant declines in patronage, but not enough to change transit's competitive position with respect to the use of private autos.

Senator DOMENICI. Would you give us your view as to whether a substantial increase in the price of gasoline has any impact on that observation?

Mr. BRIDWELL. The gasoline price increases we have experienced up to now have been taken into account in our estimate that continued use of the automobile will grow at 3 percent or more per year.

Senator DOMENICI. Even if gasoline increases in price?

Mr. BRIDWELL. It depends on how much and how fast, Senator. There was less than a 50-percent increase in gasoline price between 1973 and the present. When you discount the effects of the embargo period when there was actually a shortage, it would appear that the rate of increase in gasoline consumption was reduced by about a percent and a half, perhaps as much as 2 percent, during that period. Thus, the price increase accounted for a significant reduction in the rate of growth in gasoline consumption.

That is both a blessing and has a harmful effect. From a standpoint of energy consumption, it obviously is good. I note particularly the Congress is currently debating whether there should be mandatory requirements for the manufacturers to produce fuel efficient automobiles.

The marketplace is actually producing that result right now. While they do not divide their data on fuel efficiency, the percentage of cars that were sold in 1972 of the compact, subcompact, sport and foreign import categories, the ones we regard generally as the most fuel efficient, their share of the market in 1972 was 35 percent; in 1974, it was almost 50 percent; and for the first 6 months for this year, the figures I have seen, would indicate it is now about 65 percent.

The other side of that is that we still have the continued use of automobiles. Therefore, we have the same or an increasing number of vehicle miles. We still have the congestion associated with it, but at the Federal, State and local level, we have reduced income because our taxes are based on gallons.

Senator DOMENICI. Thank you.

Mr. BRIDWELL. I have had the opportunity to study in detail the administration's recently proposed legislation for the Highway Act of 1975. However, even a cursory examination of the legislation along with budget request for mass transportation indicates that the intent is to reduce the amount of Federal involvement in transportation, particularly in urban areas.

The policy of increased local decisionmaking, as proposed by the administration, is quite appealing, provided a realistic assessment is made of the ability of State and local governments to generate the necessary revenues to implement decisions. The facts as explained

repeatedly before this and other congressional committee in recent years by Governors, mayors and other State and local officials is exactly the opposite.

The purpose of this comment, however, is not to be critical of the Administration's proposal as much as it is meant to be critical of the missed opportunity. The missed opportunity is the failure to recommend a restructuring of our Federal highway and mass transit assistance programs in such a way that they are mutually cohesive, consistent and supportive; and that opportunity includes the potential for selectively applying energy conservation policies to urban transportation.

Notwithstanding the criticism of the highway program, particularly in urban areas, the simple fact is that it has been one of the most successful programs ever devised by Congress in carrying out a national assistance policy to State and local governments. Instead of throwing away this exceedingly successful policy, program, administrative and financial mechanism, let's instead apply what we have learned to the changing order of policy and program priorities.

It is important to keep in mind that at present public transportation handles only slightly more than 5 percent of daily person trips in our urban areas. We will be exceedingly successful if over a period of years, we can increase the transit share of person trips to as much as 10 to 15 percent. That is the realism of the problem we are dealing with.

It is apparent that all of the remainder of the person trips plus all goods movement is going to continue to be by motor vehicle for as long as we can see into the future. That means we also must continue to build, rebuild, and otherwise improve our highway system.

Stated another way, State and local governments have more than they can possibly do to improve their total urban area transportation systems with present and projected Federal assistance in the form it presently is available.

Instead of ducking the problem under the guise of more local decisionmaking, it is my hope that the Congress will take this opportunity, especially with the impetus of the energy problem, to restructure and reshape our transportation policies, programs and financing for urban areas.

It is now time to develop the implementation mechanisms to carry out the policy Congress declared in 1966 in the creation of the Department of Transportation.

That completes my statement, Mr. Chairman.

Senator DOMENICI. Thank you, very much.

Would there be any significant difference in the continued operational deficit increase between New York's mass transit system and a brand new one, like Atlanta's, that is intermodal in nature, or do you know?

Mr. BRIDWELL. There will be differences. How great those differences will be, I can't tell.

Senator DOMENICI. I am wondering about specifically your statement that the operational deficit attributable to public mass transit is escalating each year. I know it is. You haven't told us why. I guess that would take all day.

Mr. BRIDWELL. I can respond in a very summary way with a statement which is somewhat of an over-simplification. In recent years, because of the public takeover in responsibility for transit, we have had relatively stable transit fares. So in constant dollars, the fare has actually decreased whereas operating costs in the form of wages and all other elements of operating costs have increased and the rate of increase is at a slightly greater level than the consumer price index. So it is that dollar spread between relatively stable revenue and increased operating costs that is primarily accountable for the increased operating deficit.

Senator DOMENICI. On the other hand, there are those who are promoting new mass transit systems who say we must keep the price cheap in order to get sufficient utilization. That is sort of a competing philosophy with the reality that you have described. Is that correct?

Mr. BRIDWELL. Well, I don't know if it is a competing philosophy or not. Clearly, one of the ways in which mass transit is made more attractive in competition with the automobile is a price differential or a cost differential to the user. To keep transit fares low, while costs of auto use are continuing to increase, increased that cost spread and makes transit more attractive.

Senator DOMENICI. Thank you very much, Mr. Bridwell. That is an excellent statement.

Senator DOMENICI. Is Mr. Gambaccini here?

STATEMENT OF LOUIS J. GAMBACCINI, VICE PRESIDENT, GENERAL MANAGER, PORT AUTHORITY TRANS-HUDSON CORP., AND VICE CHAIRMAN, GOVERNMENT AFFAIRS COMMITTEE, AMERICAN PUBLIC TRANSIT ASSOCIATION, ACCOMPANIED BY MILTON PIKARSKY, CHAIRMAN, OF THE REGIONAL TRANSPORTATION AUTHORITY, NORTHEASTERN ILLINOIS AREA, AND B. R. STOKES, EXECUTIVE DIRECTOR, AMERICAN PUBLIC TRANSIT ASSOCIATION

Mr. GAMBACCINI. Mr. Chairman, I am Louis J. Gambaccini, vice president and general manager of the Port Authority Trans-Hudson Corp. and vice chairman of the American Public Transit Association's Government Affairs Committee. With me today is Mr. Milton Pikarsky, an internationally recognized transit leader and chairman of the Regional Transportation Authority, Northeastern Illinois Area. Also, Mr. B. R. Stokes, executive director of the American Public Transit Association.

The American Public Transit Association (APTA) is the national organization representing the urban transit industry. Its members total close to 300 rapid rail and motor bus transit systems in the United States are carried by APTA members.

We commend the subcommittee for broadening the scope of its hearings on this year's highway legislation, for the growth and orderly development of this Nation's major concentrations of population and economic activities will depend largely on governmental policies influencing all forms of transportation.

The subcommittee has indicated its interest in considering the Nation's total transportation picture. With that thought in mind, APTA's statement is presented in two sections. Section one consists of APTA's proposal for a national transportation policy.

The preface, "The National Problem," is designed to furnish a historical reference point and perspective on areas of principal concern to the public transport industry.

The second section deals specifically with the 1975 highway legislation.

At this point, Mr. Chairman, I had planned with respect to section one on policy, to highlight for several pages what we have in the way of a proposal for a national transportation policy.

In the interest of time, because I am aware of your desire to wrap up before noon, and also because Mr. Pikarsky has asked to be able to make a short statement following mine, I would like to digress from the prepared statement. (The complete statement appears at p. 929.)

Suffice it to say, a couple of years ago, the Institute for Rapid Transit and the American Transit Association came to the conclusion that the development of national transportation policy on some coordinated basis was of great urgency. Accordingly, we set up a committee to deal with this specific subject.

The committee was chaired and it continues to be chaired by John Mauro, the general manager of the Pittsburgh, Pa.—that is—the Allegheny County Port Authority.

The prepared statement, which is entered into the record, is reflective of our best effort over the last year or two in that committee to develop a provocative document that is designed to lay out the groundwork for what a transportation policy should attempt.

We have been aware that the distance between the rhetoric and the policy specifics often is rather difficult to span. We are very conscious of that. We are dedicated to trying to advance the whole matter of national policy and give it form and substance.

We feel strongly that in fact, while some progress has been made since the founding of the Department of Transportation in breaking out of the compartmentalized decisionmaking process affecting transportation that the rate of progress is no where near enough.

We note that the act establishing the Department of Transportation charges the Secretary with the mission of developing national transportation policy. We were pleased to learn yesterday that Secretary Coleman expects to make major progress in that in the very next term.

Senator DOMENICI. Are you telling me that the pages you are not going to read contain the major summaries of that committee's discussion?

Mr. GAMBACCINI. That is correct.

Senator DOMENICI. Has that committee rendered a specific study that is more detailed than your summary remarks?

Mr. GAMBACCINI. No; the full committee report is made part of the record. We don't consider it a final position or something that is unchanging. It is really meant to be a dynamic document—to stimulate debate and be subject to further modification. We hope to continue to discuss the subject of transportation policy with the

congressional committees, and most especially with such major departments of government that are making transportation policy by acts of omission or commission. We really want to stimulate improved interagency coordination among the levels of government, Federal, State, and local, and among the branches of government at each level.

We think this is the year for major emphasis on national policy especially in the vital areas of energy policy, environmental policy, land use policy and transportation.

Senator DOMENICI. I know we are short of time and we shouldn't digress, but you indicated that the chairman of your committee was the head of a port authority?

Mr. GAMBACCINI. Yes.

Senator DOMENICI. That prompts my curiosity. Does your overall study recommend any fees for the use of inland waterways or not?

Mr. GAMBACCINI. No specific such recommendation. Indeed, the thrust of the study is really urban transportation. We do not place much emphasis on other than ground and urban transportation.

Senator DOMENICI. How does a port authority director have much to do with that?

Mr. GAMBACCINI. Actually, the Allegheny County Authority is primarily a public transit agency. Our own port authority is a broader intermodal operation.

Senator DOMENICI. Proceed.

Mr. GAMBACCINI. Let me turn to comments with respect to highway legislation of 1975.

The Federal Highway Act of 1973 made two major changes in the highway program that provided much hope for urban areas. The interstate transfer provision and the expansion and flexible use of the urban systems program were appropriately heralded as great steps forward.

However, in the 2 years since the 1973 Federal Highway Act, became law we have discovered limitations on these two major elements of the program.

The 1973 Highway Act authorized an urban area that chose not to complete its urban interstate system to receive 80 percent of the estimated cost of the highway project in Federal funds to build rail transit facilities or to buy bus or rail rolling stock. In addition to limiting the purposes for which the substituted funds could be used, the law proved to be ambiguous on the matter of how much of the substituted funds would be obligated at the time of the action and what effect such action would have on future interstate apportionments for the remaining uncompleted interstate projects.

Several urbanized areas are seriously considering not building their uncompleted urban interstate routes. The transit projects to be substituted, however, would cost the Federal Government no more than the original highway projects, but in aggregate, because of higher local shares, would represent greater overall investment in public projects. We believe that any funds remaining in the transfer fund should be available for use by local areas for transit-related highway projects below interstate standards. Such increasing flexibility at the local level would be most desirable. Areas having transit projects

ready to go to bid in sufficient amounts to use all of the substituted funds should be allowed to move forward. The substituted funds should not be made available on a piecemeal basis.

The urban system program was created by the 1970 Federal Aid Highway Act. This new program was to provide Federal aid for urban streets and highways not previously eligible for Federal aid, to begin to assure some equity between our urban and rural areas. Of the 546,000 miles of streets and highways in our urbanized areas, only 60,800 or 11 percent are eligible for Federal aid in comparison to the 832,700 miles or 25 percent of all streets and highways in the rural areas which are eligible.

The urban system program was clearly intended to be a local program with projects initiated at the local level. The experience of the program suggest that this concept has not been working well. Of the \$1.78 billion that was available for obligation by June 30, 1975, only \$635 million have actually been obligated. I understand that only \$40 million has actually been obligated in the transit area.

In response to your request to provide specific provisions to aid urban areas developed by the committee, we suggest the following:

One: The highway trust fund has over emphasized highway projects and contributed to an unbalanced transportation system. We applaud the evolution of the policy by which funds from the trust fund have become more flexible to include public transit as well as highways. We support the continued evolution of the highway trust fund toward a broader scope transportation trust fund to complete the essential segments of the interstate highway system, to finance needed urban and rural highway projects, to provide sound funding for public transit, and to reduce dependence on the general fund.

Two: Highway program categories should be consolidated into three programs: Interstate, rural, and urban. Funds for the urban program should be apportioned to urbanized areas to a designated recipient.

The Governor, responsible local officials, and publicly owned operators of mass transportation services, with the concurrence of the U.S. Secretary of Transportation, should be required to designate a recipient to receive and dispense such funds which are apportioned to urbanized areas of 200,000 or more population.

We believe the procedures developed under section 5, under UMTA aegis, serve as a model for that concept.

Three: One cent of the Federal gasoline tax should be made available to the States to be made available for transportation purposes.

Four: The provisions for transfer of interstate funds should be opened to permit use of these funds for all transit or transit-related highway projects in urbanized areas. When transfers are made, the total Federal share of estimated cost of the deleted facilities should be obligated during the fiscal year in which the transfer is made. To assure equity, the Federal share transferred should be 90 percent of the interstate project.

Five: The development and major improvement of highways in urban areas should undergo extensive analysis of alternatives with special emphasis placed upon the cost-effectiveness of the improvements in meeting peak hour travel demands and traffic conditions, conserving energy and reducing air pollution.

Six: Any new legislation should contain explicit provisions requiring that highway funds be used for:

(a) Construction and maintenance of outlying parking facilities designed to divert auto commuters from congested core areas.

(b) Creation and maintenance of means for preferential treatment of public transportation—for example, exclusive bus lanes, ramp metering, preferential signalization et cetera—and independent transit rights-of-way which support public transport and also protect the longevity of highway investments.

(c) Construction of transportation interchange centers, improving the transfer of auto commuters to modes of public transport.

The American Public Transit Association welcomes the opportunity of working with the Transportation Subcommittee on these and other transit and highway matters.

Mr. Pikarsky, Mr. Stokes, and I are pleased to answer any questions you may have.

Senator DOMENICI. Thank you very much.

Mr. Pikarsky, did you want to make some comments?

STATEMENT OF MILTON PIKARSKY, CHAIRMAN, REGIONAL TRANSPORTATION AUTHORITY, CHICAGO METROPOLITAN AUTHORITY

Mr. PIKARSKY. Yes, if I may. I appreciate the opportunity to appear before this committee. My statement, with your leave, will be included in the record. I would like just to summarize it.

[The statement appears at p. 965.]

We support the aggressive movement to convert the highway trust fund into an equal ground transportation trust fund. I might indicate that Mr. Bridwell's excellent statement is one which we support very strongly.

The National League of Cities and the Conference of Mayors points out that there should be a provision for urban areas leading to direct apportionments—along with public control—in moving to a true transportation trust fund.

A comment was made on the policy of port authorities. I don't know whether it is clear that Dr. Ronan has secured the support of his political leaders in both New York and New Jersey, for a policy to limit bridge construction there, thereby making it more difficult to use automobiles and also making it easier to move toward public transportation.

This committee has a unique opportunity that has been called to out attention in the related energy crisis. I would like to briefly read a very short statement that was brought to out attention.

Despite extended deliberations and discussions, the United States continues to be without an approved energy policy. There is little disagreement about what the basic purposes of any such policy should be: (1) Limitation of the inflationary impact of rising crude oil prices on the American economy; (2) assurance of energy supplies for critical energy consuming sectors of our economy; and (3) reduction of our vulnerability to OPEC cartel petroleum price and supply changes.

The inability to reach a consensus on a policy embodying the above objectives is a potentially tragic omission which must be rectified. There are four segments of petroleum energy users which must be given priority in our national energy usage, both with regard to supply and with regard to price.

These areas are home heating, electrical utilities, mass transportation, and agricultural uses. Together these categories account for 40 percent of oil demand by end use. Our remaining categories by end use are industrial and commercial, 30 percent, and automobile 30 percent.

At the present time the United States receives its crude oil from three sources, domestic old oil, approximately 38 percent; domestic new oil, approximately 25 percent; and imported oil, approximately 37 percent.

It is clearly in the best interest of the United States that the domestic old oil should be directed to the critical end users defined above. In this fashion these users would be protected with regard to supply and protected as well with regard to price, thus minimizing the general inflationary impact of future oil price increases.

Senator DOMENICI. Let me interrupt you there. Do you know of any way that you can take old oil out of the ground and ship it directly to those critical uses you are talking about?

Mr. PIKARSKY. It is my understanding that the mechanism is in existence now through the Federal Energy Administration and the allocation process. This is why I would make the suggestion that follows.

Senator DOMENICI. You are suggesting that the refineries get old oil in some way and in some way allocate that portion that is refined which would remain cheaper and that we somehow let it find its way to the critical areas to maintain a cheaper price?

Mr. PIKARSKY. That is exactly the suggestion and the mechanism that may be in being in this Nation.

Senator DOMENICI. You mean the mechanism by way of allocation?

Mr. PIKARSKY. That is correct. Similarly, automobile gas usage should be provided totally from high priced oil imports. In this fashion, excise taxes would fall essentially on the automobile user, the least essential end use. The OPEC nations would thus be put on notice that any future price increases or production changes would be reflected immediately at the gasoline pumps and thus be subject to discretionary purchase. Similarly, any future boycotts or changes in the level of production would be absorbed principally in the available supplies of automotive gasoline.

The foregoing is not intended to provide unlimited supplies of cheap oil to home heating, electrical utilities, mass transportation, and the like. In order to encourage reduced usage in these areas, end users should be restricted in supply to the quantity consumed during 1972.

Senator DOMENICI. Let me interrupt you for a minute. I perhaps misunderstood. This is your statement that you are giving, isn't it?

Mr. PIKARSKY. This is a statement given to complement what the industry has stated.

Senator DOMENICI. I thought you had said, "A statement had come to my attention." I was wondering whose theory it was.

Mr. PIKARSKY. This theory was developed by some analysts in the safe action industry and was given to me by some people in the investment banking business. It is a very intriguing approach.

We are trying to adopt it through my board, and hopefully the National League of Cities and the Conference of Mayors will have the benefit of sharing in that.

In the case of mass transportation, objective occupancy levels should be established; in other words, 60 percent for air transportation, 50 percent for bus transportation, and 45 percent for rail transportation; and the supplies of old oil made available to each user, reduced accordingly to achieve the objective occupancy.

It is essential that the United States develop meaningful transportation and oil priorities and enunciate them. Your committee has a unique opportunity of making a dual contribution relative to two intertwined areas of national need.

I thank you.

Senator DOMENICI. How long do you envision that you would have such an allocation plan in effect?

Mr. PIKARSKY. From my exposures to people in the field, probably well into the 21st century, because it doesn't appear as though we are going to be self-sufficient much before then.

Senator DOMENICI. You don't assume that that program would have any impeding effect on bringing alternative sources of energy on board or maximizing development of crude oil in natural gas in our country?

Mr. PIKARSKY. I would actually say that the intent of the Federal direction in our Nation's interest should be to encourage the development of alternative sources so we can provide the level of mobility that Americans have learned to expect.

Through this action, we are protecting our essential needs. We may then be impeding the use of the automobile which Americans have expected and look forward to using. I think it would encourage the ingenuity of the American enterprise to develop other means to provide mobility and have other means we all would like to enjoy.

Senator DOMENICI. When you complete your study, would you try to put a figure on automobile usage which you put in a rather low priority; and would you try to put a figure on what gasoline is going to cost if you use old oil at five and a quarter and pass it through to your critical users and attach all of the increase to the automobile which I assume is not nearly as critical? Would you try to put in what that price is going to be?

Mr. PIKARSKY. We are trying to develop as much information to buttress these directions as is possible. Another interesting aspect of a report that we are researching now is one done by the Stanford Research Institute in 1967 which indicated that 33 percent of automobile trips are impulse trips.

That is a very large amount. I want to find out a little more about that, and maybe convey that information. I think we have been complacent in the use of the automobile without recognizing that the automobile user—or the transit independent—has a vested, selfish self-interest in supporting public transportation to the extent that others use public transportation.

Use of public transportation reduces demand for additional highway lanes, which during peak hours is important, and it provides for more efficient transport of goods and services by trucks. As a total policy, the Nation's converting funds toward public transportation will have a net saving on the economy in the outlying areas because it is for the peak hour times that we are spending enormous dollars on a highway system.

There are many places where we need highway construction. We see highway development as part of a total policy that we seek to achieve.

Senator DOMENICI. Do you assume that there are still a majority of the working men and women of this country that will have to drive an automobile to work for the foreseeable future?

Mr. PIKARSKY. No question about that. Anyone who indicates that we are going to have a massive change for public transportation is not aware of the facts. I think Mr. Bridwell indicated that there is presently a little over 5 trips of 100 that are by public transportation.

He says if in 10 years we can get to 2 or 3 times that, that would be a phenomenal achievement. It is my judgment that if we get to 10 percent in 10 years, that is a phenomenal achievement. But those additional trips, if they are taken at peak hours, with resulting declining energy consumption can help change substantially our energy problem and reduce our capital investments in transportation.

Senator DOMENICI. Thank you very much, Mr. Pikarsky.

I understand, Mr. Morris, you have about 10 minutes for your statement.

[Mr. Gambaccini's and Mr. Pikarsky's statements follow:]

Statement of the American Public Transit Association on the "Future of the Highway Program" to the Transportation Subcommittee of the United States Senate Committee on Public Works. July 18, 1975. Presented by Louis J. Gambaccini, Vice President and General Manager, Port Authority Trans-Hudson Corporation and Vice Chairman of the American Public Transit Association's Government Affairs Committee, accompanied by Milton J. Pikarsky, Chairman, Northeastern Illinois Area Regional Transportation Authority, and B. R. Stokes, Executive Director, American Public Transit Association.

The American Public Transit Association (APTA) is the national organization representing the urban transit industry. Its members total close to 300 rapid rail and motor bus transit systems in the United States, Canada and Mexico. Ninety percent of those using urban public transit in the United States are carried by APTA members.

We commend the Subcommittee for broadening the scope of its hearings on this year's highway legislation, for the growth and orderly development of this nation's major concentrations of population and economic activities will depend largely on governmental policies influencing all forms of transportation.

The Subcommittee has indicated its interest in considering the nation's total transportation picture. With that thought in mind, APTA's statement is presented in two sections.

Section one consists of APTA's proposal for a National Transportation Policy.

The preface, "The National Problem", is designed to furnish a historical reference point and perspective on areas of principal concern to the public transport industry.

The second section deals specifically with the 1975 highway legislation.

A PROPOSAL FOR A NATIONAL TRANSPORTATION POLICY

Recognizing the need for a comprehensive national transportation policy, the American Public Transit Association has developed a proposal for such a policy.

Our transportation systems are faced with the need for myriad improvements and for the solutions to a multitude of problems. Because this need is complex, it demands comprehensive solutions which satisfy often-conflicting criteria. Actions must be immediate, yet they must be designed to support long-term goals. Transportation improvements must be technically and financially feasible, yet they must respect the social and environmental values of the communities they serve. Finally, transportation projects in each mode must be planned not only to improve the performance of that mode, but also to enhance the ability of all modes to function in an integrated fashion.

Devising solutions which fulfill these extensive requirements can only be accomplished with the guidance of an all-encompassing transportation policy. Yet no such policy exists. The increasing level of activity in transportation at all levels of government will produce less than optimum results unless policy direction is provided.

The recent energy shortage has provided ample evidence of the need. Energy considerations have not entered into the establishment of priorities in the past; consequently our utilization of our transportation systems wastes large amounts of fuel. A formal policy which includes energy conservation as a goal is our only means of assuring that in the future our transportation systems will perform more efficiently.

Since the need for such a policy is most pressing at the federal level, APTA has directed its efforts toward defining a national transportation policy. This policy proposal is intended to stimulate discussion among those in the federal establishment who are responsible for transportation programs. Hopefully, it will serve as the basis for substantive steps to develop a formal federal policy.

A draft of this proposal was published in the February issue of "Transit Journal," with the statement that one purpose of the publication was to generate public comment. In addition, reprinted copies were sent to a selected list of transportation professionals and academics, with a request for review and comment. In early July, APTA's National Transportation Policy Subcommittee, under the chairmanship of John Mauro of the Port Authority of Allegheny County, met to analyze the comments received and to revise the proposed policy as necessary. This policy statement is the result of that effort.

This document is not viewed as a final draft. As transportation needs change, policies must be modified. This policy statement will be reviewed periodically to ensure that it accurately reflects the changing views of the transit industry and other interested parties.

AMERICAN PUBLIC TRANSIT ASSOCIATION PROPOSAL FOR A
NATIONAL TRANSPORTATION POLICY

PREFACE: THE NATIONAL PROBLEM

From the earliest days of this nation, transportation has been the solution to man's quest for freedom to explore, to build, to work, to trade, to learn and to enjoy the rewards of his labor.

Two centuries ago, the trails and rivers led him into the unknowns of the American interior. The river ports, canals and railroads helped him to build settlements, villages and towns into great centers of manufacturing, trade and commerce offering him a variety of jobs.

With increased earnings came the opportunities for the American to select where he lived and how he lived, where he bought goods and services, educated his children, obtained his health care and found leisure enjoyment.

Through the early 20th century, all of this occurred in a relatively orderly sequence of events and in fairly predictable patterns. The limited and fixed channels of transportation guided and shaped development, slowly influenced the environment and, to a certain extent, an atmosphere of tranquility prevailed. Going 50 miles from home was the adventure of a lifetime.

Then came the automobile, the airplane and air conditioning, and suddenly the choices of places exploded a hundredfold. Travel times and distances shrank rapidly. From the late 1940's onward, the mobility spawned by the auto became both a blessing to the individual and the bane of all men.

The onslaught of change triggered by the automobile outran the financial resources and powers of cities, counties and states. Cities that had welcomed the swarms of migrants in the early 1900's, burst their seams and flattened out as the automobile enabled Americans to probe all points of the compass. New growth and development mushroomed on the city fringes. Vast acreages were swiftly converted into the unplanned and uncontrolled sprawl that has laid waste to land and natural resources and usurped billions in public and private investments, thus duplicating in a generation all that had been done in two centuries of the nation's existence.

No longer was this growth channeled along traditional avenues of transportation. Rather, the nation began playing catch-up with the auto, building an endless maze of streets and highways which became obsolete as rapidly as the next suburban housing subdivision and suburban shopping center came into being and required more road improvements.

The government housing incentives of the 1950's and early 1960's favoring suburban development, coupled with concurrent government-sponsored road building projects, widened the gap between the new and the old. It was not until the mid-1960's that people began talking seriously that a balance must be achieved in urban development-restoring the inner cities and slowing down the rate of outlying growth made possible by the automobile. Traffic jams engulfed all communities large and small. Could the brakes be applied to the auto, and a balanced system of transportation be created to halt this ominous trend? These were the questions as the 1970's arrived.

While the rhetoric continues, we have become a nation of 210 million people and 125 million automobiles and motor trucks. Jockeying for places to operate and store motor vehicles has become a national occupational hazard that tests the ingenuity of each driver every day.

Eighty per cent of all American families own cars - an increase of 40 per cent over the past 15 years. The number of two-car families has quadrupled in the last 10 years. In 1973, auto drivers logged an estimated 900 billion miles, a 51 per cent increase over the past decade. More than 90 per cent of all trips made in urban areas today involve persons and goods transported by auto, bus or truck.

The enormous leaps are producing such unbelievable statistics that they are being translated in whimsical terms. In 1972, approximately 3.2 million babies were born in the United States, but the nation's manufacturers produced 9.2 million autos. We allowed only 400,000 immigrants to enter the country, but we opened the doors to 1.6 million imported cars. We buried two million persons in 1972, and junked seven million autos.

Since World War II, it is estimated that \$230 billion has been spent on highways by all levels of government. The most up-to-date guess is that four million miles of roads and streets must be maintained. Once vital central business districts are punctured with 40 to 60 per cent of their valuable land area devoted to the movement and parking of motor vehicles.

More than 50,000 persons die in traffic accidents annually. Personal and property damage claims run into hundreds of millions. These figures cause hardly a ripple, except around the holidays when the auto clubs announce the death tolls on the nation's highways over the long weekends. Only then does the nation pause to reflect on the liabilities as well as assets of the personal auto.

But something far more fundamental was happening to urban America with the growing auto and truck crunch. An outrush from the older, congested central cities was accelerated. Millions of young families were caught up in the mass exodus. It is estimated that between 60 and 70 per cent of all industrial and commercial development and their jobs were transposed from city centers to urban fringes, causing a back-and-forth flow of vehicles of such proportion that it has defied solution.

Meanwhile, the older cities were becoming the depositories of decay, the place shunned by new private capital investment, the horror-chamber of shrinking tax resources, the home of the old and the poor. The geographic division of the classes by job titles, income levels, race and social status created a permanent stain on the urban fabric.

For the three decades since World War II, America literally has been pulling itself apart, powered by those marvelous and ubiquitous inventions - the automobile and motor truck. There were those who fled, those who were fleeing and those who were trapped.

Left in the wake were the established, alternative methods of transportation which once lent character, stability and some semblance of order in the direction and pace of urbanization, development and growth.

The American railroad network, which used to link fixed manufacturing and commercial centers and move the bulk of the freight, is, for the most part, a bankrupt shambles, displaced by the more mobile motor truck and, to a lesser degree, by air freight.

The nation's transit systems which carried as many as 18.9 billion fares in 1945 (nearly 45 per cent of all person-trips) shriveled to 5.5 billion fares (7 per cent of all trips) in 1973. All transit properties were caught up in a rapid shift of population densities, changes of work-and-home travel patterns, shorter work weeks, expanded vacations and the enormous diversion of former patrons to the automobile. The sharpest declines in ridership occurred in urban areas with a population of 500,000 or more.

As recently as 1962 private transit companies managed to turn a modest profit by reducing service scheduled and avoiding needed capital investment. This produced fewer riders. It was only a matter of time before they crumbled and/or dissolved into public ownership.

By the end of 1973, there were 185 public agencies in the business of transporting people. They accounted for 91 per cent of all passengers, 88 per cent of all the revenues, 79 per cent of all vehicles owned and 90 per cent of all the employees in the transit industry. The remaining 850-plus private companies handle the rest of the transit trade in what appears to be a holding action as the trend to public ownership rolls on.

Despite a reduction in the number of transit employees (from 242,000 in 1945 to 139,000 in 1972), wage costs in this labor-intensive industry jumped from \$632 million to \$1.61 billion between 1945 and 1973. The average annual earnings of a transit worker rose from \$2,600 to \$11,500 over the 27-year period. Other costs climbed proportionately, and the tempo has accelerated rapidly with the current national inflation.

As a partial answer to the transit operator's plight, fares were boosted from 6.9 cents per passenger in 1945 to 31.5 cents in 1973. And while revenues went up, they failed to offset costs. With each fare increase, the auto found a new set of customers. By the end of 1973, industrywide operating deficits had risen to an estimated \$600 million, and may have crossed the \$800 million mark in 1974.

The physical plant of public transport agencies, inherited from private operators, consisted of aged and worn-out buses, outdated and rickety subway and rail cars, obsolete and inefficient maintenance facilities. It wasn't until the late 1960's that help

began arriving in the form of capital grants from federal, state and local governments. Limited operating grants also began flowing from state and local governments to cover the growing deficits and to help stabilize fares.

Between 1964 and June 30, 1974, a total of \$3.2 billion in federal grants has been credited with saving public transportation in 90 urban areas - either by public purchase of faltering private operations or by direct assistance to municipalities.

Through June 30, 1974, federal funds helped to purchase 20,000 buses, 2,300 rapid transit cars, 4,600 electric and diesel rail cars and 15 locomotives. Approximately 199 miles of new rapid transit lines were built, and extensions to existing rapid transit lines accounted for an additional 46 miles.

While the dollar amounts sound impressive and the results suggest a turnabout in the condition of facilities and equipment, only the surface has been scratched. Certainly not enough has been accomplished to prevent the diversion of still more millions of American commuters to the private automobile, worsening peak-hour congestion.

It was the 1974 gasoline shortage - the painful waiting in lines at service stations and the threat of industry shutdowns because of energy shortages - that once again dramatized the vulnerability of a nation that has become overly dependent on petroleum and the insatiable fuel demands of the automobile. The nation was reminded that it could literally be shut down in a matter of weeks by turning off the gasoline pumps.

For a brief spurt during and following the emergency, the transit industry enjoyed its first real ridership boom since World War II. The number of patrons soared, but that increase was diluted as gasoline returned to the service stations. In that brief period, the transit industry was in a perfect position to capture new riders. But it was caught unprepared. Instead of presenting its best face, transit reconfirmed the ideas that rush-hour transit too often consists of ancient and uncomfortable vehicles, standing riders and inflexible schedules and routes.

Even with the cost of gasoline and parking at record levels for American consumers, public transport trailed badly in its struggle to compete with the comfort, convenience and freedom of schedules and perceived lower costs of the private automobile.

It is clear that only a large-scale, sustained commitment to the revitalization of public transport will sway a significant portion of the 51 million auto commuters to choose transit for the routine, repetitive home-to-work journeys. Approximately half of these rush-hour auto trips begin and end in the central cities.

Unless American public transit is able to tap this extensive market, urban areas will continue to stagger from the interwoven problems of traffic congestion, population dispersal, increased fuel consumption and increased air pollution caused by millions of automobiles locked bumper-to-bumper across the urban landscape in the morning and evening rush hours.

We use 16 to 17 million barrels of oil a day in the United States. One third of that comes from foreign sources and all of that - that is to say, five of the 17 million barrels we consume every day - is used to move our automobiles.

Meanwhile, health experts and environmentalists warn that more than 280 million tons of pollutants are being spewed into the American skies annually, and the amount is increasing at the rate of three per cent a year. Most of this pollution emanates from urban centers, and nearly 62 per cent of the air pollution, including dangerous chemical elements, is generated by the automobile engine.

These factors of nationwide concern have enlarged the future mission of the American transit industry, and we have pointed up the urgency for a comprehensive, long-term attack on the nation's growing transportation problems.

The federal program should involve the following elements:

- * Development of a comprehensive national transportation policy in which the role of public transport is clearly defined and pursued consistently at the federal level (as suggested in Parts I and II of this report).

- * Immediate financial help to enable the transit industry to preserve its existing ridership and to probe new markets by improving equipment, facilities, service and stabilizing fares. That immediate help was assured in November, 1974 when the Congress - with the full support of the Ford Administration - approved landmark legislation committing \$11.8 billion in federal capital and operating assistance for transit over the six-year (1975-80) period.

* Expanded federal aid rising to \$4.5 billion per year to cover capital and operating costs as rapidly as the public transport agencies can gear up their plans and programs and the production capabilities of the nation are able to respond. It is the belief of the transit industry that planning, engineering, construction and supply functions can be expanded to support this level of investment within five years.

PART I. A PLACE FOR PUBLIC TRANSPORT IN A NATIONAL
TRANSPORTATION POLICY

Overall Federal Responsibility

The responsibility for a national long-range, multimodal, comprehensive and coordinated transportation policy should be vested at the federal level within the office of the Secretary of Transportation. Other agencies whose responsibilities have an impact on transportation should coordinate their policies with the Department of Transportation (DOT).

The federal role in transportation policy should relate long-range transportation goals to other national goals in the areas of growth and distribution of population, land use, energy, environment and social policy. Institutional mechanisms should be established to assure increased coordination and cooperation between DOT and other federal agencies in the preparation and periodic revision of objectives, policies and programs on a national and regional scale.

The principal objective of federal transportation activities should be to foster coordinated research, planning and development of a national transportation system, between states and within the urbanized regions of states, to meet the nation's current and future needs for the safe, orderly and expeditious flow of people and goods in an economic, environmentally sound and socially acceptable manner at the earliest possible date. Highest priority should be assigned to those programs which will permit the nation to grow and prosper in normal times and continue to function in periods of national emergencies (e.g., war, civil disturbances, energy shortages and air pollution crises).

Inasmuch as transportation needs now outstrip the financial capabilities of the private sector, cities and states, substantial and continued federal financial assistance is necessary. Federal grants should encourage multimodal transportation planning at the federal, state and regional levels. These plans should project needs over 15 - to 20 - year periods, but should be translated into development programs which can be detailed, funded and initiated in six-year increments.

Specific Federal Goals

* The federal government should take the leadership in the formation of policies and in the development of a national network of highway, rail, air and waterway improvements which link states and their urban areas. Special emphasis would be placed on:

- (1) Identifying the function and location of each mode in the national network.

(2) Interweaving modes so that they are mutually supporting, as well as provide alternates in event of national emergencies.

(3) Providing for major transfer points readily identifiable as essential to the national transportation plan. (e.g., ports, airports, rail-truck terminals).

* The federal government should stimulate and guide state and regional efforts to provide for the location and design of multimodal transportation systems within urban areas in patterns which take off from the national transportation network, and which, based upon more detailed analysis, will:

(1) Lead to more orderly and rational development of urban areas. Densities should complement and preserve the sizable investment in transportation facilities.

(2) Provide a stimulus to revitalize deteriorating inner cities while encouraging growth in new planned communities.

(3) Produce a style of living which is less wasteful of energy, land, minerals and capital resources.

* The federal government should give high priority to funding the planning, research and development of multimodal programs and transportation facilities which will conserve fuel.

* Equally important, priority should be given to those programs that will improve the quality of the urban environment through:

(1) Using urban space in a more efficient and aesthetic manner.

(2) Reducing transportation congestion and accidents.

(3) Reducing air pollution.

(4) Reducing noise levels.

* The federal government should assure that all persons have mobility and access to employment, cultural, health, educational and recreational opportunities by supporting public transportation operations and capital programs that furnish an appropriate level of service to, from and between activity concentrations within urban areas.

* The federal government should create a national inventory of essential transportation improvements, spaced over time and located in various geographical areas, which will:

(1) Stimulate employment in the manufacture and construction of transportation facilities and equipment as a job expansion measure.

(2) Assure manufacturers and suppliers of stable and continuing markets in order to promote more private research and competition in the transportation supply industry.

Planning Relationships

Federal urban transportation policy, to be effectively realized, must be translated into action programs at the regional level. The planning process is the first step toward regional implementation. Federal policy should require such a planning process and should set in motion the programs by which regional plans are accomplished.

The federally designed network of major intercity highways, railways, waterways and air transportation facilities should provide the basic, overall framework from which the more detailed

plans are prepared at the state and regional levels in all urbanized areas.

With respect to state and regional plans, DOT should outline the general requirements to be met by state and regional transportation plans and programs, leaving substantial local option for trade-offs that will reflect local conditions and values.

Preparation of regional plans should involve the state, regional and local governments, agencies involved in planning, transportation development and operation, and citizen groups. Federal policy should stress the need for participation in the planning process, rather than rigidly standardizing the form of agency required in each urban area.

Elements of Regional Transportation Plans

Regional transportation plans in urbanized areas, should deal with at least the following basic considerations:

(1) Strategies for development and redevelopment of urban areas, as reflected in regional land-use plans, zoning ordinances, open-space laws and other similar laws, leading to a more orderly urban form.

(2) Identification of high-priority urban corridors for major transportation investments projected in the 15-to-20 year master plan.

(3) Examination of alternatives and the delineation of the proposed transportation mode, or combination of modes, for each major corridor. The selection of highways, rapid or surface transit, or commuter railroads should be predicated on an analysis

of population densities, topographic conditions, trip-making characteristics and environment, energy, economic and social considerations.

(4) Merger of programs for public highways, public transport, parking and traffic management projects into a single strategy, designed to reduce congestion, fuel consumption and air pollution in the inner core areas of urban regions.

(5) Identification of facilities required for the movement of goods and the flow of trade and commerce within and between regions, giving special attention to coordination among truck, rail, water and air transportation operations.

(6) Agreement among the various implementing agencies, concerning who will be charged with specific responsibilities for detailed planning, engineering, construction and maintenance of specific capital projects and operating programs.

(7) Establishment of priorities leading to a comprehensive six-year regional development program which, upon acceptance and approval by the region, state and federal agencies, trigger a programmed flow of government and private funding.

(8) Enunciation of a policy to specifically allocate the proportionate share of federal highway funds to be devoted to transit and transit-related programs, as a condition for DOT certification of the planning process.

Federal Transportation Funding Purposes

While policies often are intermingled with specific programs, it would appear that Congress must define more clearly the purposes

for the appropriation and expenditure of federal funds for transportation purposes. Funding is the key instrument for implementing overall policies and evaluating results. In that vein, the American Public Transit Association (APTA) suggests that federal budgets, in addition to identifying the degree and sources of funding, incorporate the following specific purposes for appropriations for the movement of people by ground transportation:

(1) Highway and highway-related activities

- * Complete the essential connecting segments of the interstate system.
- * Construct and improve principal arterial and collector routes identified in regional plans.
- * Repair and maintain highway projects built with federal funds.
- * Construct and maintain outlying parking facilities designed to divert auto commuters from congested core areas.
- * Create and maintain exclusive bus lanes and independent transit rights-of-way as a means of supporting public transport and protecting the longevity of highways.
- * Eliminate safety hazards for drivers and pedestrians.
- * Improve signal and other traffic control devices.
- * Construct transportation interchange centers, improving the transfer of auto commuters to modes of public transit.
- * Execute traffic management programs including car and bus pools, staggered work hours and other programs designed to improve transportation efficiency during peak hours.

(2) Transit-related activities

* Acquire, construct, reconstruct and rehabilitate transit facilities.

* Purchase and refurbish rolling stock and equipment.

* Provide off-street parking with proximity to transit terminals, transit patron shelters and transit information signs.

* Stabilize transit fares at reasonable levels through a continuing program of federal grants for operating assistance.

(3) Intercity rail activities

* Upgrade facilities and equipment of railroads involved in the Regional Railroad Reorganization Act, and where warranted and feasible, improve the movement of intercity rail passengers.

* Continue operation and improvement of AMTRAK services including the Northeast Corridor rail service.

* Enable private railroads, not involved in reorganizations, to obtain low-interest loans for purchase of equipment and improvements to roadbeds and facilities to continue freight and passenger service.

* Preserve rights-of-way, scheduled to be abandoned, for use in other public transportation.

(4) Aviation activities

* Improve access to the nation's major aviation terminals by increasing the variety of modes that interface with the terminal.

(5) Specialized transportation

* Improve mobility of specialized groups, such as the elderly and physically handicapped, through the innovation of various programs. DOT funds and regulations for these purposes should be coordinated with similar provisions of health and welfare programs.

* Reduce prices on all modes of transportation for the elderly on limited and fixed incomes.

* Use special equipment for the door-to-door delivery of handicapped persons in urban and rural areas.

Research, Development and Training

DOT should begin to centralize the administration of federally-sponsored research and development activities affecting the transportation industry.

Overall, direction of research projects and programs may be more appropriately guided through the creation and support of an institution for transportation research located within and advising DOT.

Some of the priority projects to be undertaken by private and public institutions, funded with specific allocations of federal funds, might include:

(1) Development of new fuels and greater efficiencies in the use of existing energy sources employed in public and private transportation.

(2) Establishment of criteria for evaluation and application of modes of transportation in different situations as an aid to better planning and informed public decisions.

(3) Reduction of the accident rate in transporting of people and goods

(4) Increased emphasis directed to the improvement of existing and near-term technology including automated guideway transit. Demonstration of advanced transit concepts should receive secondary emphasis with 100 per cent federal funding.

(5) Establishment of environmental and ecological guidelines to assist in planning and evaluation of transportation systems.

(6) Improvement in the flow of freight and goods using existing and new integrated systems.

(7) Generation of academic and field studies leading to the development of new management, operating, construction, maintenance and marketing procedures.

(8) Formation of beginning and mid-career training programs to develop personnel in all modes of transportation, especially in intermodal planning, operations and management.

(9) Development of a central data bank and information distribution system, including national and international developments.

Evaluation of National Transportation Policies

Because transportation policies are influenced by a variety of national events, and therefore, will change over time, it is recommended that the Secretary of Transportation form a national Transportation Policy Council to prepare, review and alter policies.

Members of the Council would include the Secretaries of Commerce; Health, Education and Welfare; Housing and Urban Development; the chairman of the Civil Aeronautics Board; the Administrator of the Environmental Protection Agency; the Administrator of the Federal Energy Administration; the chairman of the Federal Maritime Commission; the chairman of the Interstate Commerce Commission and the Administrator of the National Aeronautics and Space Administration.

Members of technical advisory task forces would be drawn from the transportation industry, including the American Public Transit Association.

PART II. PUBLIC TRANSPORT'S ROLE IN DEVELOPMENT OF A NATIONAL TRANSPORTATION PROGRAM

The American public transport industry can best relieve the nation's immediate transportation problems by aggressively meeting the transportation needs of two major groups of U.S. residents: those who cannot travel by private automobile and those who should not and probably would not use their cars for the bulk of their journeys if they had a suitable alternative.

By focusing on these primary targets, the transport industry would be making its greatest contribution toward the realization of a number of economic and social goals critical to the well-being and progress of more than 200 million Americans - nearly three-fourths of the nation's population - who will occupy urban centers by the year 2000. The principal objectives of public transport would be:

(1) Preservation of one of the basic tenets of life in a democratic society - freedom of mobility and access to employment, cultural, health, educational and recreational opportunities by all persons regardless of age, economic circumstances, or other disadvantages.

(2) Reduction of the wasteful characteristics of an affluent and prosperous nation in which prolific private auto travel has produced a rapid assimilation of natural resources (including fuel), increased traffic congestion and accidents, mounting air and noise pollution levels, extensive consumption of land by highways and parking facilities and a continued erosion of the sizeable investment already made on road systems - all to the detriment of the quality of life in an urban environment.

Coupled with sound urban design and land-use policies, a vigorous and solid public transport system can become a key instrument in guiding and restructuring the economic, physical and cultural development of the nation's urban centers. This, then, is a third national objective. It attracts little attention because of the complexities of joint land-use and transportation planning and the long-term nature of the results.

To meet these objectives, both the public transport industry and public decision-makers must unify in a course of action that produces a substantial and sustained commitment of time, effort and funds over a minimum of 20 years. Only such an effort can

offset nearly three decades of decline of physical plant and services in American public transport caused by rising costs within the industry and loss of customers to the private automobile.

In short, public transport's role in the American transportation marketplace must be reestablished and regenerated on an unprecedented scale, promising and delivering comfort, convenience and safety to millions of passengers daily.

PART III. PUBLIC TRANSPORT'S IMMEDIATE MARKETS

Public transport's immediate markets comprise two categories:

(1) The so-called captive market which exceeds 52 million persons (nearly 26 per cent of the nation's population) who, because of age, economic condition, personal choice or physical disabilities do not drive a private car.

A recent study showed that of the metropolitan area workers belonging to households without cars, 80 per cent live within central cities. More than 60 per cent of the urban poor live within central cities. About 55 per cent of those 65 years of age or older reside in central cities. In addition, most central business district workers live in central cities - not in the suburbs - and choose public transportation because of the costs and inconvenience of owning a car in congested central cities.

(2) The so-called choice market which consists of an estimated 51 million Americans who use their cars for home-to-work and other

repetitive trips and account for the distorted peaks of automotive usage every morning and evening in every metropolitan area. These commuters are directly responsible for the rapid surge in traffic congestion, fuel consumption and auto-generated air pollution found in this nation's urban areas today.

Developing the Potential Market - A Strategy.

An overall strategy must be developed to gain even the most visible markets. Such an approach would probably involve one or both of the following elements:

(1) Stabilizing Existing Ridership. A moderate upturn in transit usage can be attained through intensive and aggressive marketing efforts aimed principally at gaining riders in off-peak periods when surplus equipment is available. The marketing program should include quickly implemented measures to improve the product (e.g., better equipment, rearranging the location and frequency of service), selective price incentives including stable fares and greater promotional activities by the transit operator.

(2) Increasing Capabilities to Handle a Greater Volume of Peak Hour Riders. This will involve expanding the capacities of transit systems dramatically at times when transportation demands are greatest in the early morning and late afternoon hours.

In most transit systems, buses carry the bulk of the transit patrons. Added bus service during rush hours means added drivers

and maintenance personnel. Manpower costs constitute 75 to 85 per cent of all operating costs. As wages and employee benefit expenses rise, the transit operator is caught in a cost-price squeeze that impedes any major effort to attract more peak-hour patrons.

As in many other labor-intensive businesses, the key to improved results in the transit industry is increased productivity - moving more people for each manhour expended.

Increased productivity in transit operations can be achieved through exclusive rights-of-way which shorten time and distance, use of larger vehicles and a system for coupling vehicles in trains without substantially increasing manpower requirements.

These steps reduce running times, assure on-time service, furnish more seats and comfort for the customer, and at the same time, strengthen the economics of public transport. More customers mean more revenues, a lesser net cost per passenger carried, a better chance for stability of fares and moderation of government operating subsidies in the future.

Therefore, from the standpoint of the consumer, operator and taxpayer, improved transit efficiency in peak hours is the most compelling reason for exclusive, or preferential, rights-of-way for all transit vehicles. Investment in large-capacity, fixed guideway rapid transit systems should occur in corridors where passenger volumes and equipment and manpower demands are the heaviest. The identification of these corridors would allow for the development of usable segments on an incrementally funded basis.

PART IV. THE NATIONAL MASS TRANSPORTATION
ASSISTANCE ACT OF 1974

The National Mass Transportation Assistance Act, signed by President Ford on November 26, 1974, holds great promise of meeting a number of objectives contained in this text. It fulfills many proposals advanced by the transit industry in earlier attempts to obtain meaningful federal aid.

The industry, in previous position papers and through appearance before Congressional committees, had proposed:

(1) The need for a sizeable, long-term capital commitment.

The new act provides \$7.8 billion in contract authority for six years (FY 1975-80), and solidifies the concept of long-range planning goals carried out in incremental six-year development programs.

(2) Continuing a separate transit fund. No other trust fund has been invaded; transit has its own financing pool, although dependent on general tax revenue sources.

(3) The need for federal operating grants. This is a major breakthrough in that nearly \$4 billion in operating grants is provided for over the six-year period. It is to be distributed by a formula based on population and population density, with grants escalating each year in anticipation of rising costs.

(4) Segregation of operating and capital grant programs. Capital grants are earmarked for capital purposes while operating grants may be used for capital or operating expenses, essentially at the discretion of the recipient.

(5) Direct funding to recipients. This provision is applicable to designated recipients in urbanized areas with a population of more than 200,000 persons and through the governors in areas that have under 200,000 population.

(6) Financial aid to private as well as public operators. Funds will be made available to both public and private operators based on programs developed through the Metropolitan Planning Process. These services must be rendered to the public on a regular and continuing basis.

(7) Special assistance for the elderly and handicapped. The industry favored provisions for the elderly and handicapped. However, the 1974 act mandates a minimum of half-fares for the elderly and handicapped during off-peak periods, but provides no additional funds to carry out improved special services of this nature.

(8) Continuation of research and development and educational training programs. The 1974 act does not improve the existing situation.

(9) Operating assistance to public transportation services in small urban and rural areas. The 1974 act did not provide for such assistance; such a program should be instituted.

(10) Refined definition of eligible capital projects. Included now is the acquisition, construction and improvement of facilities and equipment for use, operation or lease in mass transportation service. Eligibility should also include the costs of designing, engineering, locating, surveying, mapping, acquiring right-of-way, relocation assistance, and acquiring and replacing housing necessary to carry out projects.

With the 1974 transit legislation, a new era of hope appears to have opened for millions of Americans in urban and rural areas. The auto-bound commuter may yet discover a viable, attractive alternative for his daily journeys, and millions of other Americans without cars can be assured future mobility at a reasonable price. Those were the main targets of new federal aid.

All communities should benefit - large and small, urban and rural. However, it can be expected that the national significance and the success of the latest federal programs will be measured in the nation's larger metropolitan areas where public transport needs are the greatest and more aggressive steps must be taken to meet traffic, air pollution and energy conservation goals. This is also where public transport costs are the greatest.

As APTA views the pressing need for prompt action - and looks apprehensively at the years of impoverishment which must be overcome - the 1974 act represents a giant leap forward for a nation unaccustomed to modern, inexpensive and comfortable transit service. But the new legislation is by no means the end of the journey.

Hopefully in an objective and constructive manner, APTA raises a number of concerns which must be addressed in the coming months and years. Specifically, these concerns include:

(1) The fact that the appropriation of \$7.8 billion in capital grants between 1975 and 1980 is clearly inadequate. As inflation drives up the cost of existing projects, and as new programs move from engineering to construction, capital needs will have to be reassessed. APTA currently estimates (without benefit of in-depth surveys) that annual capital appropriations may have to escalate from \$1.3 billion in 1975 to \$3.6 billion in 1980 - requiring a total authorization of \$13.9 billion in capital funds over the six-year period. (See table below.)

FEDERAL FUNDING REQUIREMENTS NATIONAL MASS TRANSPORTATION ASSISTANCE ACT OF 1974 (in millions of dollars)			
<u>Fiscal Year</u>	<u>Operating Grants</u>	<u>Capital Grants</u>	<u>Total</u>
1975	\$ 300	\$ 1,350	\$ 1,650
1976	500	1,500	2,000
1977	650	2,000	2,650
1978	775	2,500	3,275
1979	850	3,000	3,850
1980	900	3,600	4,500
	<u>\$3,975</u>	<u>\$13,950</u>	<u>\$17,975</u>

(2) The adequacy of \$3.9 billion in operating grants over six years. Much depends on the rate of the national inflation and the continued financial aid by state and local governments.

(3) The continued dependence on annual congressional appropriations to fund both capital and operating programs from general revenues. Since competition for general funds will increase over the years, the transit industry would be on a sounder fiscal footing and more secure long-range planning could go forward if a special revenue source were developed. A four-cent increase in gasoline tax, for example, would produce four-billion dollars a year.

(4) The uncertainties posed by administration regulations. The approval process seems to stretch out to all levels of government. Growing complexities and time delays are brought on by the social, environmental and economic impact process. Special provisions protecting interests of employees appear to run counter to the goals of economies, and in some cases, conflict with existing industry labor contracts.

On these and on other surfacing issues, the industry pledges continued cooperation with federal, state and local governments to help fulfill man's lifelong quest for freedom to explore, to build, to work, to trade, to learn and to enjoy the rewards of his labor through better transportation.

SECTION TWO
THE 1975 HIGHWAY LEGISLATION

The Federal Aid Highway Act of 1973 made two major changes in the highway program that provided much hope for urban areas. The interstate transfer provision and the expansion and flexible use of the urban systems program were appropriately heralded as great steps forward.

However, in the two years since the 1973 Highway Act became law we have discovered limitations on these two major elements of the program.

The 1973 Highway Act authorized an urban area that chose not to complete its urban interstate system to receive 80% of the estimated cost of the highway project in federal funds to build rail transit facilities or to buy bus or rail rolling stock. In addition to limiting the purposes for which the substituted funds could be used, the law proved to be ambiguous on the matter of how much of the substituted funds would be obligated at the time of the action and what effect such action would have on future interstate apportionments for the remaining uncompleted interstate projects.

Several urbanized areas are seriously considering not building their uncompleted urban interstate routes. The transit projects to be substituted, however, would not cost as much as the original highway project. The areas would use the remaining funds for transit-related highway projects, below interstate standards. Such flexibility at the local level would be most desirable.

Areas having transit projects ready to go to bid in sufficient amounts to use all of the substituted funds, should be allowed to move forward. The substituted funds should not be made available on a piecemeal basis.

The urban system program was created by the 1970 Federal Aid Highway Act. This new program was to provide federal aid for urban streets and highways not previously eligible for federal aid. Of the 546,000 miles of streets and highways in our urbanized areas, only 60,800 or 11% are eligible for federal aid. This compares with 832,700 miles or 25% of miles of all streets and highways in rural areas being eligible. The urban system was initiated to begin to provide some equity between our urban and rural areas.

Another element of the urban system was that it was to be a local program, projects were to be initiated at the local level. The experience of the program suggests that it has not been working well. Of the \$1.780 billion that was available for obligation by June 30, 1975, only \$635 million has been obligated.

Because of these reasons, we propose six specific changes in the highway program.

1. The highway trust fund has overemphasized highway projects and contributed to an unbalanced transportation system. We applaud the evolution of the policy by which funds from the trust fund have become more flexible to include public transit as well as highways. We support the continued evolution of the highway trust fund toward a true trans-

portation trust fund to complete essential segments of the interstate highway system, to finance needed urban and rural highway projects, to provide sound funding for public transit, and to reduce dependence on the general fund.

2. Highway program categories should be consolidated into three programs: interstate, rural and urban. Funds for the urban program should be apportioned to urbanized areas to a designated recipient. The Governor, responsible local officials, and publicly-owned operators of mass transportation services, with the concurrence of the U.S. Secretary of Transportation, should designate a recipient to receive and dispense such funds which are apportioned to urbanized areas of two hundred thousand or more population.
3. One cent of the federal gasoline tax should be made available to the states to be made available for transportation purposes.
4. Transfer of interstate funds should be opened to use for all transit or transit-related highway projects in urbanized areas. When transfers are made, the total federal share of estimated cost of the deleted facilities should be obligated during the fiscal year in which the transfer is made. To assure equity, the federal share transferred should be 90% of the interstate project.
5. The development and major improvement of highways in urban areas should undergo extensive analysis of alternatives, with special emphasis placed upon the cost-effectiveness

of the improvements in meeting peak hour travel demands and traffic conditions, conserving energy, and reducing air pollution.

6. Explicit provisions should be contained in any new legislation requiring that highway funds be used for:
 - (a) Construction and maintenance of outlying parking facilities designed to divert auto commuters from congested core areas.
 - (b) Creation and maintenance of means for preferential treatment of public transportation (i.e. exclusive bus lanes, ramp metering, preferential signalization, etc.) and independent transit rights-of-way which support public transport and also protect the longevity of highway investments.
 - (c) Construction of transportation interchange centers, improving the transfer of auto commuters to modes of public transport.

The American Public Transit Association welcomes the opportunity of working with the Transportation Subcommittee on these and other transit and highway matters.

"THE NEED FOR A TRANSPORTATION TRUST FUND
AND A TRANSPORTATION ENERGY ALLOCATION PROPOSAL"

TESTIMONY PRESENTED
TO THE
SUBCOMMITTEE ON TRANSPORTATION
COMMITTEE ON PUBLIC WORKS

BY
MILTON PIKARSKY, CHAIRMAN
REGIONAL TRANSPORTATION AUTHORITY
(CHICAGO METROPOLITAN AREA)

JULY 18, 1975
DIRKSEN SENATE OFFICE BUILDING
ROOM 4200
WASHINGTON, D.C.

REMARKS BY MILTON PIKARSKY
SENATE TRANSPORTATION SUBCOMMITTEE HEARING
"THE NEED FOR A TRANSPORTATION TRUST FUND
AND A TRANSPORTATION ENERGY ALLOCATION PROPOSAL"

TO ADD TO SUPPORT FOR A TRANSPORTATION TRUST FUND WHICH MR. GAMBACCINI HAS DISCUSSED IN THE COMPREHENSIVE STATEMENT, I WOULD LIKE TO OFFER A SOMEWHAT MORE COMPREHENSIVE STATEMENT FOR YOUR CONSIDERATION.

ONE OF THE UNUSUAL ASPECTS OF TRANSPORTATION IS THAT WHILE IT IS RECOGNIZED IN A GENERAL WAY THAT A STRONG TRANSPORTATION SYSTEM IS CRUCIAL TO THE POLITICAL, ECONOMIC, AND SOCIAL WELL-BEING OF THE NATION, THIS FACT IS NEVER UNDERSTOOD IN A SPECIFIC WAY. WE KNOW, FROM LOOKING AT EUROPEAN ECONOMIES, THAT WITH THIS POST-KEYNSIAN INFLATION AND THE RESOURCE SCARCITIES THAT HAVE DEVELOPED WORLDWIDE, THAT EUROPEAN COUNTRIES HAVE OFTEN BEEN MORE RESILIENT IN DEALING WITH THESE PRESSING PROBLEMS OF RESOURCE SCARCITY, INFLATION AND UNEMPLOYMENT THAN WE HAVE, AND MANY ANALYSTS THINK THIS IS IN PART DUE TO THEIR SUPERIOR PUBLIC TRANSIT SYSTEMS. CERTAINLY, WHEN WE EXAMINE OUR OWN SYSTEM, WE SEE THAT THE AUTOMOBILE IS HIGHLY DEPENDENT ON A LONG LINE OF SERVICES AND RESOURCES AND THAT INTERRUPTION OF ANY PART OF THIS SYSTEM LEADS IMMEDIATELY TO A NATIONAL CRISIS. YET CONVERSELY, IF WE LOOK TO SEE WHAT IS BEING DONE TO PROVIDE ON A NATIONAL LEVEL AN ALTERNATIVE TO THE AUTOMOBILE AS A WAY OF REDUCING THE FEAR AMONG THE NATION'S PEOPLE CONCERNING THEIR ENTIRE DEPENDENCE ON THE AUTOMOBILE, NOT MUCH OF WHAT HAS BEEN INTENDED IS VISIBLE.

NATIONALLY WE ARE LACKING IN A SINGLE VISION AS TO WHAT WE WANT THE NATION TO BE LIKE, IN TERMS OF SAY WELL ORGANIZED, MORE ORDERLY AND RATIONAL DEVELOPMENT IN A LESS WASTEFUL AND MORE COMPATIBLE ENVIRONMENT.

HIGH VISIBILITY IS ONE OF THE KEY ELEMENTS OF THE EXISTING HIGHWAY TRUST FUND. IT IS A WAY OF IMPARTING SPECIFIC RESPONSIBILITY, OF PROVIDING A YARDSTICK AGAINST WHICH PERFORMANCE CAN BE MEASURED. IT ACTS AS A FOCUSING MECHANISM ON WHICH TO BUILD PUBLIC ADVOCACY. IT CARRIES WITH IT SOMETHING OF A LONG TERM INFLUENCE WHICH IS EXTREMELY IMPORTANT IN BUILDING THE LONG TERM ADVOCACY TYPE SUPPORT NEEDED IN ALL OF OUR MOST PRESSING NATIONAL PROBLEMS. MOST OF THESE PROBLEMS DON'T HAVE EASY, QUICK SOLUTIONS; INSTEAD THE SOLUTIONS DEPEND ON DEVELOPING NEW PUBLIC ATTITUDES, A NEW SENSE OF AWARENESS AND INSIGHT, DEVELOPMENT OF TECHNOLOGY WHICH REQUIRES A LONG TIME BETWEEN INITIAL STIMULUS AND COMPLETION, AND BETTER WAYS OF GETTING THINGS DONE.

ANOTHER THING WHICH A TRUST FUND DOES IS THAT IT ALLOWS THE CONGRESS TO GROUP RESPONSIBILITY UNDER ONE UMBRELLA. TODAY THE HUMANITARIAN AREAS CONCERNING THE ELEVATION OF THE LOT OF THE POOR AND HANDICAPPED TO BECOME PRODUCING CITIZENS IS UNIVERSALLY RECOGNIZED AS AN AREA CLOSELY TIED TO PUBLIC TRANSPORTATION. MANY OF THE PROBLEMS WHICH THE COUNTRY HAS FACED IN SOLVING THESE WELFARE MATTERS CAN BE LAID AT THE DOORSTEP OF THE AUTOMOBILE. PERHAPS A MAJOR PART OF THE RESPONSIBILITY FOR THE SOLUTION SHOULD BE PLACED ON THE SAME TRANSPORTATION DOORSTEP.

THE TRUST FUND CONCEPT GIVES YOU THAT OPPORTUNITY, IF WE HAVE THE COURAGE TO TAKE IT.

MOST IMPORTANT, A TRANSPORTATION TRUST FUND IS A VIABLE WAY OF "GETTING THINGS DONE." WE HAVE TO RECOGNIZE THAT IT IS GETTING MORE DIFFICULT ALL THE TIME TO ACCOMPLISH REAL PROGRESS IN ANY FIELD. WHILE ANY MECHANISM WHICH PROVIDES A TOOL FOR GETTING THINGS MOVING IS PROBABLY ALSO OPEN TO ABUSE, THE CRITICAL ECONOMIC CONSEQUENCES TO THIS NATION AS A RESULT OF THE ENERGY CRISIS REQUIRES COURAGEOUS ACTION. NO DOUBT ABOUT IT, OUR HIGHWAY PROGRAM HAS CONTRIBUTED TO OUR PRESENT DILEMMA IN OIL SCARCITY, AND IF ECONOMISTS ARE TO BE BELIEVED, RESOURCE SCARCITY WORLDWIDE IS BEHIND THE INFLATION AND UNEMPLOYMENT PROBLEMS AS WELL. THESE PROBLEMS CAN BE EQUATED IN A VERY REAL WAY WITH WHAT HAPPENED TO THE HIGHWAY TRUST FUND WHICH HERETOFORE HAS BEEN TOO RESISTANT TO CHANGE. BUT WE SHOULD NOT LET THE FEAR OF WHAT HAS HAPPENED TO US UNDERMINE OUR EFFORTS TO REMEDY THE PROBLEMS. SERIOUS PROBLEMS REQUIRE STRONG REMEDIES AND IT IS LIKELY THAT OUR MOST SEVERE PROBLEMS, THOSE OF ENERGY, INFLATION AND UNEMPLOYMENT, WILL REQUIRE JUST AS POWERFUL TOOLS TO SOLVE THEM AS THE TOOLS WHICH CREATED THEM.

THAT IS WHY WE URGE THE CREATION OF A TRANSPORTATION TRUST FUND, SUBJECT TO THE CONSTRAINTS AND CONSIDERATIONS MENTIONED IN MR. GAMBACCINI'S STATEMENT.

BUT THE TRUST FUND IS ONLY THE TOOL, NOT THE POLICY, AND IN TERMS OF POLICY I WOULD LIKE TO SHARE WITH YOU A STATEMENT RELATING TO A PROPOSED ENERGY POLICY WHICH REALLY SHARPENS THESE ARGUMENTS IN A CONCISE AND ACCURATE WAY, WHICH MAY BE OF GUIDANCE IN YOUR

DELIBERATIONS AND WHICH HOLDS IN IT THE SEEDS OF THE SOLUTION TO CERTAIN PRESENT CONGRESSIONAL DILEMMAS:

DESPITE EXTENDED DELIBERATIONS AND DISCUSSIONS THE UNITED STATES CONTINUES TO BE WITHOUT AN APPROVED ENERGY POLICY. THERE IS LITTLE DISAGREEMENT ABOUT WHAT THE BASIC PURPOSES OF ANY SUCH POLICY SHOULD BE:

1. LIMITATION OF THE INFLATIONARY IMPACT OF RISING CRUDE OIL PRICES ON THE AMERICAN ECONOMY;
2. ASSURANCE OF ENERGY SUPPLIES FOR CRITICAL ENERGY CONSUMING SECTORS OF OUR ECONOMY; AND,
3. REDUCTION OF OUR VULNERABILITY TO OPEC CARTEL PETROLEUM PRICE AND SUPPLY CHANGES.

THE INABILITY TO REACH A CONSENSUS ON A POLICY EMBODYING THE ABOVE OBJECTIVES IS A POTENTIALLY TRAGIC OMISSION WHICH MUST BE RECTIFIED. THERE ARE FOUR SEGMENTS OF PETROLEUM ENERGY USERS WHICH MUST BE GIVEN PRIORITY IN OUR NATIONAL ENERGY USAGE, BOTH WITH REGARD TO SUPPLY AND WITH REGARD TO PRICE. THESE AREAS ARE HOME HEATING, ELECTRICAL UTILITIES, MASS TRANSPORTATION AND AGRICULTURAL USES. TOGETHER THESE CATEGORIES ACCOUNT FOR 40% OF OIL DEMAND BY END USE. OUR REMAINING CATEGORIES BY END USE ARE INDUSTRIAL AND COMMERCIAL 30% AND AUTOMOBILE 30%.

AT THE PRESENT TIME THE UNITED STATES RECEIVES ITS CRUDE OIL FROM THREE SOURCES: DOMESTIC OLD OIL - APPROXIMATELY 33%; DOMESTIC NEW OIL - APPROXIMATELY 25%; AND IMPORTED OIL - APPROXIMATELY 37%.

IT IS CLEARLY IN THE BEST INTEREST OF THE U.S. THAT THE DOMESTIC OLD OIL SHOULD BE DIRECTED TO THE CRITICAL END USERS DEFINED ABOVE. IN THIS FASHION THESE USERS WOULD BE PROTECTED WITH REGARD TO SUPPLY AND PROTECTED AS WELL WITH REGARD TO PRICE, THUS MINIMIZING THE GENERAL INFLATIONARY IMPACT OF FUTURE OIL PRICE INCREASES.

SIMILARLY, AUTOMOBILE GAS USAGE SHOULD BE PROVIDED TOTALLY FROM HIGH PRICED OIL IMPORTS. IN THIS FASHION EXCISE TAXES WOULD FALL ESSENTIALLY ON THE AUTOMOBILE USER, THE LEAST ESSENTIAL END USE. THE OPEC NATIONS WOULD THUS BE PUT ON NOTICE THAT ANY FUTURE PRICE INCREASES OR PRODUCTION CHANGES WOULD BE REFLECTED IMMEDIATELY AT THE GASOLINE PUMPS AND THUS BE SUBJECT TO DISCRETIONARY PURCHASE. SIMILARLY, ANY FUTURE BOYCOTTS OR CHANGES IN THE LEVEL OF PRODUCTION WOULD BE ABSORBED PRINCIPALLY IN THE AVAILABLE SUPPLIES OF AUTOMOTIVE GASOLINE.

THE FOREGOING IS NOT INTENDED TO PROVIDE UNLIMITED SUPPLIES OF CHEAP OIL TO HOME HEATING, ELECTRICAL UTILITIES, MASS TRANSPORTATION AND THE LIKE. IN ORDER TO ENCOURAGE REDUCED USAGE IN THESE AREAS END USERS SHOULD BE RESTRICTED IN SUPPLY TO THE QUANTITY CONSUMED DURING 1972.

IN THE CASE OF MASS TRANSPORTATION, OBJECTIVE OCCUPANCY LEVELS SHOULD BE ESTABLISHED (E.G. 60% FOR AIR TRANSPORTATION, 50% FOR BUS TRANSPORTATION AND 45% FOR RAIL TRANSPORTATION), AND THE SUPPLIES OF OLD OIL MADE AVAILABLE TO EACH USER REDUCED ACCORDINGLY TO ACHIEVE THE OBJECTIVE OCCUPANCY. GROWTH IN PETROLEUM DEMAND BEYOND THE LEVEL OF PETROLEUM SUPPLIES DIRECTED TO EACH PREFERRED USER WOULD HAVE TO

BE SUPPORTED BY THE PURCHASE OF NEW, HIGH PRICED PETROLEUM, THUS
CREATING AN INCENTIVE FOR CONTINUED ECONOMY IN HOME HEATING AND
CONVERSION OF UTILITIES TO OTHER ENERGY FORMS.

IT IS ESSENTIAL THAT THE U.S. DEVELOP MEANINGFUL TRANSPORTATION
AND OIL PRIORITIES AND ENUNCIATE THEM. YOUR COMMITTEE HAS A UNIQUE
OPPORTUNITY OF MAKING A DUAL CONTRIBUTION RELATIVE TO TWO INTERTWINED
AREAS OF NATIONAL NEED.

JULY 18, 1975

STATEMENT OF ROBERT MORRIS, URBAN TRANSPORTATION CONSULTANT

Mr. MORRIS. I am Robert L. Morris. I am an urban transportation consultant. For the record, the list of witnesses indicates that I was formerly associated with Arthur D. Little, Inc. That is not correct.

I have submitted a statement for the record, setting forth my view that our urban transportation programs have been counter productive; that our new highways in particular, have failed to minimize travel time, or to reduce congestion or to save lives.

At the same time, these programs are committing us to ever larger consumptions of energy, a commodity we squander at our peril.

Rather than repeat what I have already offered for the record, I would now like to spend the time allotted to me by using my statement as background for discussion of the three questions raised in Senator Bentsen's letter:

1. Should the new legislation contain more specific provisions to aid urban areas?
2. What are the transportation needs over the next several years?
3. How can urban highways be used more efficiently?

In reading Senator Bentsen's letter, I underlined one word in each of those questions. As to the new legislation for aid to urban areas, I underlined aid. For transportation needs, I underlined the word needs, and for making urban highways more efficient, I underlined the word efficient.

I would like to talk on those three specific points first, focusing on those three specific words.

First, aid. If your objective is to aid urban areas, then you should stop new highway construction. I realize a statement like that puts me in an antihighway category. I assure you I am not. I am neither antihighway or prohighway. I am not supported by the highway builders or so-called highway users, nor am I supported by the more amorphous groups that go under the general label of highway fighters.

I have no axe to grind. I am a disinterested, but certainly not an uninterested observer of urban America. I have worked in the urban transportation field for many years. I have learned that new roads, particularly freeways, are destructive of cities.

How? First by making inexpensive, undeveloped land outside the urbanized area more accessible, they channel capital investments away from the city, undermining the city's tax base.

Senator DOMENICI. Mr. Morris, I wonder if you would excuse me for a moment. I would like to talk to Senator Stafford. He is going to have to take over the hearings.

I understand you are going to have to leave by 11:30. Perhaps Chairman Bentsen will be here by then.

When Mr. Morris finishes, it was our intention, Senator Stafford, to have Les Lamm and some of the other contributing panel members join the principal witnesses.

Since you were not here for the first hour and a half—and I understand there are important reasons for your absence—I would like to suggest at a minimum, Mr. Davis, representing the league, and Mr. Gambaccini direct their findings with reference to the failure to get money into the urban street system and mass transit system, including the amounts of money authorized but actually how little has gotten into the field.

Also, Mr. Davis, your contention that wherever the State has had much to do with that transition that there have been various types of road blocks and even changes of road designations, so as to minimize the real flexibility within the urban center.

I would hope you would direct your questions with your figures at Mr. Lamm. We ought to get it on the record what the administration thinks about implementing the statutes in the past.

Senator Stafford, I have to leave. I thank you for relieving me.

Senator STAFFORD [presiding]. Would you continue please, Mr. Morris?

Mr. MORRIS. First, by making inexpensive, undeveloped land outside the urbanized area more accessible, they channel capital investments away from the city, undermining the city's tax base.

I have heard many businessmen, who should know better, urge the construction of freeways to stimulate downtown development. Unfortunately, for the downtown businessmen, those freeways go two ways. Rather than to help revitalize cities, they pull people and money away from the center to the outside.

There are many examples we could discuss, if we had time. Suffice it to say I know of no city where freeways have benefited downtown.

The second point is urban freeways are socially highly discriminatory. The nature of the transportation planning process dictates that the lowest income people will pay the greatest price and enjoy the fewest benefits from new roads, while upper income people are in the opposite position, with benefits grossly disproportionate to costs.

Third, freeways are inordinately wasteful. Not only do they foster new trips and longer trips and add to congestion, all of which waste precious energy, as I have pointed out in my statement, but also by leading to low density development—often called sprawl—they require excessive public expenditures for schools, police, and fire services, sewers, water supply, trash collection, and so on.

Fourth, by encouraging low density development, they undermine the viability of public transportation, thereby reducing transit service and effectively depriving many people who have no alternate choice, of an ability to travel.

The second word I underlined in Senator Bentsen's letter was need. It is important to distinguish between needs and wants.

My daughter thinks she needs a new car. She wants one. She will get along without it.

So-called highway needs studies are really highway-wants studies. They indicate the roads people would like to have if automobile ownership continues to increase, if per capita gasoline consumption continues to increase, if existing or recently past upward trends continue upward.

The fallacy of that whole approach is that it ignores completely one side of the supply/demand equation. It assumes that increasing demand is inexorable, and therefore, there is a constant need for a greater supply.

But demand is not inelastic. It can be controlled by policy. It can and is also controlled by economics. Trip making declines as gasoline prices rise. And, most important to the transportation planner, travel demand is responsive to the supply of transportation facilities.

When the supply is increased the demand increases, so that the transportation planners' forecasts become self-fulfilling if the plans are

carried out. But when the supply is held static, demand tends to remain static. And I emphasize here, as I did in my statement, that static travel demand in a city has no adverse impact on the economic well-being of that city.

The third word I underlined was efficient. Every incipient engineer learns in college that sound economics is the linch-pin of good engineering. A structure may be functional, aesthetically pleasing, and durable, but if it does not represent a good engineering solution to a problem, it fails the test of sound economics.

Consider, then what our highway engineers do. They design roads that, if their forecasts are correct, will be efficiently used three-tenths of 1 percent of the time. It is standard practice to design roads for what the engineers call the 30th highest hour. That is, they plan for the road to be well used, not congested just well used, 30 hours out of the year.

For the remaining 8,730 hours per year the road would be underutilized. Hardly an efficient design.

Now the highway engineer will tell you he does the same thing that the sanitary engineer does. For example, storm sewers are designed for storms that may occur only once in 50 years.

But a flood of water is a far greater menace than a flood of cars. We don't have much control over nature. We can control traffic and trip making. Furthermore, if there is excess sewer capacity, God makes no extra effort to fill it up.

On the other hand, if you increase the capacity of highway systems, we know full well from a wealth of experience and data collection that the demand will rise to meet the supply. I submit that the most efficient roads are the ones with the heaviest volumes of traffic, where peak periods last from 2 to 3 hours in the morning and again in the evening and even at other hours the volume is substantial.

Not only are you getting your money's worth on a road like that in terms of utilization by vehicles, but you are also moving an even higher proportion of people. There is a direct correlation between congestion and car pooling. The greater the congestion, the higher the automobile occupancy.

Finally, I should like to make a few comments about mass transit. Senator Bentsen asked specifically about transit needs. In many respects we are making the same mistakes with transit that we are with freeways.

A rail rapid transit system that extends from the city center out to suburban satellite communities also promotes sprawl and also generates energy wasting excessive automobile trips. But the real tragedy of these rail systems is that they are so inordinately expensive, costing billions of dollars, and they do so little toward solving urban transportation needs.

I am talking about new rail systems. I am not talking about what we already have.

Rail systems invariably focus on downtowns, because downtown is generally the prime trip attractor in the region. But even though it is the major destination, it still represents less than 10 percent of the total destinations in most metropolitan areas.

If you are willing to spend \$2 or \$3 billion for less than 10 percent of the people, what are you going to spend on the other 90 plus percent?

Trip making in cities is becoming ever more diffused, more decentralized and more subject to sudden change. In these circumstances we need a flexible system of public transportation. We could easily spend all day talking on this subject. But I urge the committee to investigate ways to encourage greater use of small scale, adaptable transit systems that can serve the entire community, equally well at all hours of the day and night, in safety.

I refer to such systems as community taxicabs, minicar curbside rentals, neighborhood vans, jitneys and dial-a-ride. These and other concepts are generally included under the subject of paratransit.

In conclusion, I respectfully offer my sincere thanks to this committee for giving me the opportunity to present my views on urban transportation needs. If I have done nothing else, I hope I have effectively underscored the critical relationship of urban roads and energy consumption. You can build new roads or you can conserve energy. You can't do both.

Senator STAFFORD. Thank you very much, Mr. Morris.

I think the record had better show that this Senator suffers from the same problem all of us do. We are assigned to so many subcommittees our time has to be rather unrealistically split.

I am sure that the chairman, Senator Bentsen, is at some other equally important meeting. Hopefully, he will come in at 11:30, when this Senator has to go to another meeting. That isn't to be any indication of a lack of interest on any of us. We are grateful to all of you for taking part in the panel this morning.

[Mr. Morris' statement follows:]

"Transportation Problems of Urban America"

Statement of Robert L. Morris
before the
Subcommittee on Transportation
Committee on Public Works
United States Senate
18 July 1975

Albert Einstein once observed that common sense is the sum total of all those prejudices accumulated before the age of 18. For the past 20 years we have been using a common sense approach toward solving the transportation problems of urban America, and because of our prejudices the problems we have attempted to solve have only gotten worse. We wanted to reduce travel time; we wanted to alleviate congestion; we wanted to make our roads safer. We have done none of those things. Indeed, we shall never do any of those things if we continue to follow the same path, blindly, that we have followed for 20 years. I say "blindly" because there is a wealth of evidence to demonstrate the failure of transportation planning in America, but the planners refuse to see the evidence as they continue to design urban freeways and urban rapid transit systems.

Every major American city has plans for new high-speed, limited-access roads. Many cities also have plans for rapid transit. Increasingly, lines have been drawn between proponents of freeways and proponents of subways. One encounters discussions only of which is better, which more effectively serves the needs of the people. But the issue is not roads versus rails. To limit the choice to those two alternatives is comparable to offering a man a choice between typhus and malaria. Both freeways and subways are pernicious for cities. If that statement gets your dander up, I urge you, in the words of Al Smith, to "look at the record."

As we have noted, the three principal objectives of transportation planners have been to reduce travel time, to alleviate congestion, and to improve safety. Let's compare each of those objectives with what has been accomplished by our new urban transportation systems. First we'll look at travel time.

Travel Time

There is much evidence to show that one's daily travel habits, particularly trips to and from work, are related to the time it takes, rather than the distance involved. In most larger cities the average trip to work takes about 20 minutes. The much-longer-than-average trips in the largest cities are balanced by many much-shorter-than-average trips. For every office worker whose commute takes an hour, there is a small shop owner who lives above the store, a gas station attendant who lives a couple of blocks away, a TV repairman whose shop is across the street from his house. The 20 minute average has been remarkably consistent. The earliest studies of travel patterns were made 50 years ago, in the 1920s. In those days, when many urban trips were made by streetcar, the study data showed that the average journey to work lasted about

20 minutes. For example, a 1925 study in Washington, D.C.¹ indicated the average trip consumed 21.3 minutes. A 1934 study² found that the average walking time to work was 19 minutes. Going back another hundred years to the early 1800s, when there were no automobiles and no public transportation, the typical distance between home and job was about a mile: a 20 minute walk.

Nor is this phenomenon restricted to the United States. In London the average work trip is just over 20 minutes.³ Frenchmen typically spend 22 minutes, West Germans 17 minutes, and Belgians 24 minutes in traveling to work.⁴ Whatever may be the psychological reason for this time-distance pattern, its consistency over the years in changing travel modes is of great significance. If we plan a new road to connect two points, for the purpose of shortening the travel time between those points, the result of our efforts will be not to reduce them at all, but rather to stimulate people into making longer trips.

The 19th century trains and electric streetcars that extended out to the open countryside permitted people to live where the air was pure and the ground was clean and still get to work in their acceptable travel time. Baltimore's first omnibus began service on May 1, 1844. The Sun newspaper editorialized that day:

In other cities, in addition to the general convenience, these lines have tended to enhance the value of property in the outskirts of the city, enabling persons to reside at a distance from their places of business, in more healthy localities, without loss of time and fatigue of walking, whilst the cost is but a trifle.

Streetcars arrived on the scene fourteen years later, gradually extending a web of steel that linked downtown with all parts of the spreading community. In the 20th century, the automobile added impetus to the spreading suburban development that began with the omnibus.

While 20 minutes remained a comfortable daily expenditure of time to or from work, technological developments allowed greater and greater speeds and thus the distances possible to be covered increased. The earliest public transportation doubled the walking speed of three miles an hour in urban areas. Beyond the city's congestion, a horse-drawn omnibus could do 15 miles an hour. When the larger cities — Boston, New York, Philadelphia, and Chicago — installed subways and elevateds, the average speed went to 15 miles per hour on locals and 25 miles per hour on express runs.⁵ Commuter railroads in turn doubled these speeds.

Travel time by automobile, as we all know from daily experience, depends upon the roadway and when the trip is made. Downtown,

usually, we may do well to cover a mile in five minutes; on a high-capacity freeway, during uncongested hours, a mile may consume just over a minute. Consciously or otherwise, the daily commuter takes into account the varying speeds that road conditions permit, and the 20 minute average journey to work is maintained.

In smaller cities, the automobile has actually eliminated the traditional 20 minute travel time. Before the motor vehicle became commonplace, travel times in less populated communities were comparable to those in larger cities. However, with widespread automobile ownership in a community that embraces only a few square miles, it is possible to live out on the edge of development with a ten acre plot of ground and still be downtown in three or four minutes. In these smaller urban areas, the "rush hour" of concentrated traffic often lasts just about 15 minutes. A delay of a minute is termed "congestion." But, of course, no one likes annoyances, no matter how small; and everyone, it has been argued by highway planners, would like to be able to go a little faster. So we find the incongruous situation of freeways being planned for small towns -- freeways that will concentrate more traffic at fewer spots and that will provide time savings that can only be measured with the second hand of a watch. For example, in a typical city with 50,000 residents, a trip to the center of town from the outskirts of residential development by freeway would save about one minute, compared with travel on local streets. For the average small town resident, living somewhat closer in, the saving of time would be even less.

But in any city, large or small, a new freeway will bring, at first, higher speeds. Then, in short order, traffic volumes build up beyond the planner's expectations. The attractiveness of a new road is irresistible. Trips that would otherwise not have been made occur only because of the new road. A worker who formerly rode by bus or in someone else's car now drives his own car. A shopper goes to an additional suburban mall to compare the prices of comparable stores. A side trip to look over a set of golf clubs is made by a businessman on route to call on a customer. Many trips, such as these, added to the traffic that was planned for, result in unexpected loads for the new road to handle. Then the freeways, which were supposed to improve urban travel, gradually break down.

A report of the Highway Research Board (now called the Transportation Research Board) stated the issues of temporarily improved traffic flow succinctly.

Most important, traffic flow improvements would normally result in reduced travel times within the affected transportation corridor, and they in turn might result in increased vehicle volumes within that corridor and longer

trip lengths. That would produce increases in vehicle-miles of travel, which might in some cases generate air pollution levels that exceed the national ambient air quality standards. Therefore, significant improvements in traffic flow must be accompanied by other transportation control strategies that are designed to restrain vehicular volumes, or air quality benefits may be canceled out by increased traffic volumes.⁶

Ironically, it is the design of the freeway that is largely its undoing. To achieve high speeds on the freeway, intersections are eliminated; streets cross either over or under the freeways. To permit vehicles to get on and off the high-speed roads, some streets have ramp connections, providing interchanges between the two facilities. These interchanges are normally spaced not closer than a mile apart, compared with typical city intersection spacings of about a tenth of a mile. The problem immediately becomes apparent: a freeway with perhaps ten times the vehicular load of a local street has only one-tenth as many access points. Traffic jams at the interchange between freeway and local street can be monumental. The point is illustrated in a newspaper article from the Brentford and Chiswick Times (England):

Since the building of the sector [of the M₄] through Chiswick, which was ostensibly to relieve the place of through traffic by providing a fast wide route to carry it, through traffic in every residential street and road near it has increased, and there is not the slightest doubt that much of this traffic, and the worst of it, is directly generated by the motorway.

Unfortunately, before the freeways break down from excess traffic, the initial increased speed that these roads permit affect the shape of the community's growth, and travel distances are increased. Then, when the jams come, the same old "solution" is proposed: build more freeways.

The increase in travel speeds that result from new transportation facilities has a subtle effect on individuals' travel habits, which, over time, is reflected in a transformation of the form and function of the city. In a typical situation, Charles Commuter lives in a suburban community, driving to work in 20 minutes. As more houses are built in the suburbs, traffic volumes increase, congestion develops, and the 20 minute trip becomes 25, then 30 minutes. A 20 minute ride that takes 30 minutes is frustrating. So Charlie and his neighbors raise hell: something must be done

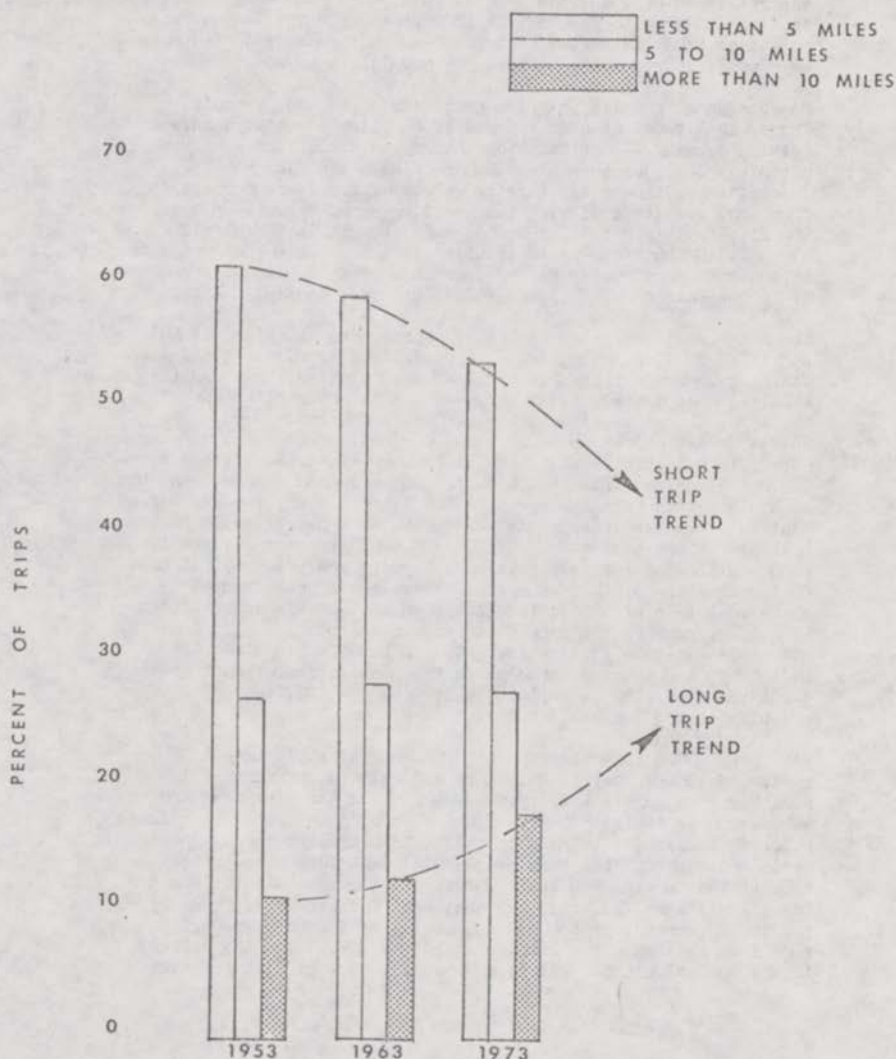
about this intolerable situation. Public officials, ever responsive to their affluent constituents, build a new freeway that will cut driving time in half. Our happy suburbanite can now get to work in 15 minutes. Freeway advocates proudly point to the saving of time and the reduction of congestion. Then one day Charlie Commuter gets transferred to Chicago. His replacement, Tom Traveler, is brought in from Tulsa. Tom is also accustomed to a 20 minute drive to work, so he looks for a home about that far from the downtown office. With the new freeway, Tom can live five miles beyond Charlie's house, in one of the newest developments, and still get to work in about 20 minutes. But time marches on, and so do the homebuilders. The freeway becomes more crowded; the journey to work increases in time. Pressures again build up. And so it goes.

To use a different example, with real data, a study in Boston of changing travel patterns resulting from industries leaving the center city to relocate around outlying Route 128 brought out some interesting information. On the average, the industries included in the study had kept half of their old employees when they moved; the other half were new employees who had never commuted to the center city location. Travel time to work averaged 28 minutes for the old employees, 21 minutes for the new. No doubt, as time goes by some of the older employees will either move closer to work, or they will leave the company and be replaced by 20 minute commuters.

It should be obvious that the 20 minute factor doesn't remain constant. As we saw with Charlie Commuter, the trip to work consumes increasing amounts of time as traffic volumes grow, until a new or widened road is provided. Then the travel time is reduced. A study of journey to work times in any urban area over a period of decades will reflect such fluctuations: an increase above 20 minutes, then a reduction below 20 minutes, inevitably followed by more ups and downs, never getting too far away from the traditional average. The greatest variation from the average has come in recent years (except during World War II, as we shall see), as spreading development continued, but, in some cities, the anticipated road construction didn't follow.

Records of travel distance kept for twenty years by the Motor Vehicle Manufacturers Association⁸ make it clear that trip lengths are increasing. In 1953, 61.7% of all trips by automobile were for less than five miles, 27.2% were for five to ten miles, with only 11.1% of trips going ten miles or more. Ten years later, the percentage of short trips had decreased to 59.6%, the medium range trips amounted to 28.1%, while the longest trips were 12.3%. After another decade, the percentages read 54.1, 27.8, and 18.1 respectively -- a marked increase in the longer trips, accompanied by a comparable decrease in the shortest trips. (This is shown graphically in Figure 1.)

Length of Automobile Trips



Sources: Motor Vehicle Manufacturers Association
Figure 1

A study of the effect of adding 80 miles of freeway in Detroit⁹ showed that a doubling of average speed resulted in a 67% increase in the average distance traveled for comparable trip purposes. Between 1946 and 1960 the average Philadelphian increased the distance between home and job by more than 30%¹⁰ -- an increase due in large measure to the Schuylkill Expressway. The London Transportation Study estimated that the construction of proposed motorways would increase the average journey length by 40%.¹¹

Encouragement for longer trips comes also from mass transit. Those who live at or near the end of the line are always sure of getting a seat -- at least on the way to work. Inner city residents may consider themselves lucky to have standing room. Indeed, buses frequently pass by groups of people on corners in town, all available sitting and standing space taken by people who live farther out. San Franciscans thought this wouldn't happen with their new rapid transit system; it purportedly has the capacity to provide a seat for everyone. Yet, despite disappointingly low patronage, there are often standees on BART trains.¹²

The San Francisco system emphasized speed, and therefore it had to sacrifice service. The slowing down, stopping, waiting, and then starting up again that must occur at each station lengthens the total time of travel, and thereby lowers the average speed. Thus, the fewer the stops, the higher can be the overall speed. For BART's design objective of 45 miles per hour average, it was necessary to maintain about two miles between stations. If the spacing had been less than that, the trains would never have been able to achieve their maximum speed of 80 miles an hour, because before that rate could be reached it would have been necessary to start braking for the next stop. Stations two miles apart may provide good service for sparsely developed Hayward and Concord, but most of the citizens of Oakland are effectively excluded from the system. A trip of a mile to a suburban station, in anticipation of a long, comfortable ride downtown, is acceptable. A trip of a mile to an in-town station is wasted; a bus stop is a shorter walk away, and the bus would reach the destination of most in-city dwellers as quickly as rapid transit would. BART, too, gives priority to the longest commute.

BART, and METRO in Washington, and the newest rapid transit systems just underway in Baltimore and Atlanta, paradoxically will generate more travel by automobile. If these systems are as successful as their promoters promise, many journeys to work from suburban homes will be made by rail rather than by road. Indeed, it is anticipated that many people will look for homes in the suburbs that are conveniently located with respect to the rapid transit stations, for that purpose. But for every trip made by public transportation to work there will be four or five trips made from that suburban home to shops, to school, to the library, to the medical clinic, all by automobile. A rapid transit system

that reaches far out beyond the city limits tends to foster automobile travel, brings pressure for the purchase of additional family cars, and, ironically, finally results in the family abandoning the transit system.

Congestion

Now, let's consider the matter of congestion, the alleviation of which is an objective of the transportation planner. Freeway advocates boast of reduced traffic on nearby streets once a freeway is opened. Those claims are valid, but flawed. The streets tend to fill up again, just as does the freeway. It's not long before the old roads, avenues, and boulevards are as crowded as ever. The small town of Bel Air, Maryland, had more than 10,000 cars pass through its business community on an average day. Then the parallel John F. Kennedy Memorial Highway was opened and traffic volumes through Bel Air dropped by nearly a quarter -- for a while. Within a few years the daily traffic counts were back above 10,000 and climbing. West of St. Louis, a new freeway, labeled I-244, was, among other things, intended to relieve traffic on a nearby parallel road, Lindbergh Boulevard. It did -- for a few months. Before a year had passed, Lindbergh Boulevard was carrying traffic volumes as heavy as before, while I-244 was likewise swarming with vehicles.

It is interesting that the freeway supporters always talk about traffic relief on parallel roads. They never mention the roads that provide access to the freeways -- roads that often are badly overburdened with loads they were never called on to handle until the freeway came along. For example, in England it was observed that

Each extra journey generated by the motorways also imposes an extra load on the secondary roads which provide access to the motorways and on the local roads on which the vast majority of journeys begin and end. This effect is likely to swamp the diversionary effect, and if it did not, any relief brought by the motorways to the rest of the system would soon be absorbed by more local traffic generation. Hence it is quite probable that there will actually be more traffic on the rest of the road system if the motorways are built than if they are not.¹³

The congestion does not always return so dramatically as in the St. Louis example, but inevitably congestion does return. Why? Well, partly because of people like Charlie Ommeter and Tom Traveler and their lengthening trips. But something else happens

when a new freeway is built: new kinds of trips -- trips that wouldn't otherwise have been made -- are made all because of the availability and convenience of a freeway. (Standard traffic engineering texts refer to this phenomenon as "generated" or "induced" traffic.)

For example, traffic on the Merritt Parkway at Stratford, Connecticut had been increasing at a rate of 700 cars per year. Then, in 1958, the Connecticut Turnpike opened. There was an immediate drop in cars on the parkway, but the total volume for the two roads combined showed an increase of 9,000 vehicles -- nearly 13 times the amount of the previous growth rate. By 1973 there were more cars than ever on the Merritt Parkway, and the volume on the two roads combined was three times as heavy as in pre-turnpike days.¹⁴

The Connecticut Turnpike "generated" traffic. Trips that had not previously been made were taken solely because of the attractiveness of the new road. The concept of generated traffic has long been recognized, even though no one yet knows how to predict it with any accuracy. The oldest traffic engineering text, published in 1955, warns that with a new road "... there appears an entirely new traffic which never existed in the area before ... Induced traffic appears on almost every new traffic facility, especially in urban areas and under conditions where the facility creates a new accessibility between areas. This factor calls for extreme care in estimating traffic volume."¹⁵ Another text, popularly referred to by highway engineers as "The Blue Book"¹⁶ and generally regarded as "The Bible" for highway design, notes

Generated traffic consists of motor vehicle trips (other than by public transit) that would not have been made if the new facility had not been provided. Generated traffic is made up of three categories: new trips not previously made by any mode of travel; trips that previously were made by public transit; and trips that previously were made to a different destination ...¹⁷ (Emphasis added)

If the concept of generated traffic is so well known, why is it not taken into account in transportation planning? Why isn't that "extreme care", that the authors of the traffic engineering text called for, exercised? The answer is that no one knows how to measure it. Where simple projections of traffic on a single road are made, occasional guesses about the generation factor are included. With the more comprehensive, area-wide transportation studies, there is no known way of building this factor into the trip forecasts, so that the generated traffic (specifically the type of generated traffic referred to in the emphasized portion of the quote from "The Blue Book" above) is overlooked. The

result of this neglect is evident. New roads are often overloaded almost as soon as they are open to traffic. Expensive and disruptive widenings are made years before they were expected to be needed.

Because of the generated trips and the ever lengthening trips that result from freeway construction, the concentration of vehicles on these automotive channels becomes massive. Instead of automobiles spread fairly evenly over a broad network of streets, as in pre-freeway days, the cars now funnel from huge conduits onto just a few ramps that dump vehicles onto local streets in quantities beyond the capability of those streets to absorb them. Drivers are unable to move when the traffic signal changes from red to green; they must often wait for a second or a third green signal before passing through the intersection. The congestion in turn affects traffic moving on the cross streets, and the delays spread. The freeway, that was intended to relieve the congestion on local streets, ends up adding to the congestion. The local streets become choked, and traffic backs up at a standstill on the "high speed" road."

Freeways are not the only creators of unwanted and unwarranted congestion; rapid transit sometimes is also guilty. Residential areas around many rapid transit stations are first inundated by moving vehicles, then submerged in a sea of parked commuters' cars. In a recent report on BART in the Washington Post¹⁸, Jack Eisen has quoted an elderly woman who lives near a rapid transit station: "You ought to see it at eight in the morning. It's like the Dodge 'Em ride they used to have at Playland (an old amusement park)."

But can we afford to ignore congestion? Won't our cities be overwhelmed with excessive numbers of vehicles jammed onto insufficient streets if we don't provide some relief? A simple, and accurate, answer is No. And again the record will support us.

To begin with, we know from experience that long range traffic forecasts are worthless. Continued growth of traffic in congested urban areas does not occur — because the congestion itself acts as a constraint. It doesn't constrain economic growth, only traffic growth. In fact, the most vital cities are the ones with the most congestion. Indeed, only a dead or dying city has no congestion. Healthy cities have crowded streets — and the crowding is self-regulating. Volumes build up to an acceptable level, then traffic growth stops, even as the city's business continues to expand. Transportation planners are reluctant to

* On I-95 in northern Virginia there are signs warning "Watch for Stopped Vehicles, 4:30-6:30 PM"

admit it, but the evidence is there for all to see. The streets of downtown San Francisco, Chicago, New York, and Washington, for example, were carrying heavy traffic volumes in the early 1960s. In more than a dozen years since then, no relief was provided to those streets that were originally designed for horses and buggies. Continual development took place in those cities; the downtowns remained active and healthy. But, by and large, traffic volumes did not increase. In Washington, D.C., while 20 million square feet of new development was taking place downtown¹⁹, with no new transportation facilities, the daily number of automobiles entering the downtown area actually declined slightly.²⁰ Having reached acceptable levels of congestion years before, the streets continued to work with reasonable, if often annoying, efficiency. The ultimate traffic jam, long predicted by both friends and foes of the automobile, never occurred. It never will.

There is even more significant evidence of the effects of congestion on reducing travel. Think back, for a moment, to World War II. For four years, no automobiles were manufactured (except for the military), and gasoline was strictly rationed. Mass transit, as a result, enjoyed unprecedented use and profits. Transit vehicles were regularly filled to capacity, and beyond. The annoyance and discomfort of jammed streetcars and buses, with no alternative means of travel except by foot, caused many people to relocate the job, the house, or both. The result: by the end of the war the average journey to work was significantly reduced. In Baltimore it was 14½ minutes; in Washington it was 12½ minutes. Ten years later, in 1955, with new cars flowing from the assembly lines and the exodus to the suburbs in full swing, the average Washingtonian's trip to the job was back to 20 minutes.

I'm not suggesting we adopt the draconian measures that were necessary during a major war. I offer this example solely to show that people will adapt to congestion by changing their trip patterns, reducing the amount of travel, if they can be convinced that no relief in the form of new roads is in the offing. But if we build a new freeway to alleviate that congestion, you can count on traffic volumes going up again, until the available road capacity is once again fully used. Automobiles, like nature, abhor a vacuum.

Safety

Now keeping the first two points we have discussed in mind: (1) that travel times tend to remain constant and increased travel speeds only result in longer trips, and (2) that congestion acts as a constraint on travel, tending to reduce and shorten trips -- let's look at the third objective of the transportation planner: to improve safety.

Freeway proponents point to lower accident rates on the modern facilities compared to local roads -- a highly misleading comparison. The local roads with higher accident rates are, to a large degree, two lane roads²⁰ with speed limits that used to go up to 60 miles an hour, where the threat of a head-on collision exists every time one driver attempts to pass another and where cars dart unexpectedly from unmarked driveways coming from gas stations, taverns, farms, and residences. Of course the accident rate on such a road will be higher than on a rural turnpike with four or more lanes, broad landscaped medians, no driveways and no street crossings.

Freeway advocates claim that, even on urban roads, the fatality rates are only two-thirds as high as on normal city streets. Perhaps so. But with a lengthening of trips by 20%, and a generation of 25% additional trips -- by no means unusual for freeways -- the lower fatality rate is more than offset, and the freeway doesn't save a single life.

When accidents occur on freeways they can be massive. A news item datelined Corona, California stated, "Chain-reaction traffic accidents turned the Riverside Freeway near here into a two-mile long junkyard yesterday as more than 100 vehicles piled up in a dense fog."²² Such occurrences were unknown in pre-freeway days. By generating more, longer, and faster trips the freeway will increase, not decrease, accidents. Consider what has happened since the Interstate System was launched in 1956. The 1960s was the decade that saw the transformation of freeways from a southern California phenomenon to a ubiquitous system that affected nearly everyone. In 1960 there were 38,000 deaths caused by motor vehicles in the United States, for a rate based on population of 21.2 per 100,000 people. By the end of the decade there were 54,000 such deaths, for a rate of 27.7 per 100,000 people -- a 30% increase in the rate of fatalities.

Motor vehicle deaths as a proportion of all accidental deaths has increased steadily over the years. In 1940, 36% of accidental deaths were caused by motor vehicles. In 1950 the percentage increased to 38; by 1960 it was 41%; by 1970 it had reached 47%.²³ Automobile fatalities go up as freeway concrete goes down.

The environmental impact statement prepared by Massachusetts highway engineers to support their plan for doubling the width of I-95 from north of Boston to the Merrimack River near the New Hampshire border²⁴ made a strong argument of the safety issue. The engineers compared the low accident rate on the uncongested

* 90% of all rural highway mileage is two-lane.²¹

freeway with a higher accident rate on nearby, crowded US Route 1. The comparison was valid as far as it went. What the engineers chose to ignore was that the old, congested road had experienced no traffic deaths during the period of their data gathering, while there had been seven people killed on the freeway. Which is more important, crumpled fenders or human lives?

The accident picture is even gloomier when we realize that the dollars spent on new roads could be much more effectively spent on eliminating hazards on old roads. So much can be done in the field of safety at minimal cost that some highway officials should be charged with gross negligence for ignoring basic maintenance of existing roads while spending millions of dollars on new road construction. Donald Stabler, president of The Road Information Program, has reported that many school bus accidents result from dangerous road and bridge conditions.²⁵ After a bridge in North Carolina collapsed, killing four people and injuring sixteen others, Representative James H. Edwards observed, "This is a dereliction of duty. We build four-lane highways, and we build by-passes around cities, yet we don't have enough money for safe bridges."²⁶ The Representative knew whereof he spoke. People in North Carolina who were familiar with details of that bridge collapse told me that in the pocket of one of the victims, as his body was fished out of the water, was a letter from the Highway Department, thanking him for his letter expressing concern about the safety of that very bridge, but explaining that there were no available funds for improving it. At the same time, North Carolina highway officials were trying to overcome the objections of residents of the Outer Banks to a new, five-lane expressway to be built over the sand dunes, supplementing an existing two-lane road that is adequate even for the state's 20 year traffic forecast.

Let the highway engineers concentrate on keeping lane lines and center lines brightly painted; on keeping lights illuminated and properly focussed; on placing guard rails to guard the life of the motorist rather than to protect an expendable sign; on installing traffic signals that enhance safety and are responsive to varying traffic demands; on planting shrubbery in medians to block headlight glare from on-coming cars; on smoothing out dangerous curves; on providing a third lane up hills for two-lane roads; on resurfacing road surfaces that are slippery when wet; on hundreds of routine, unglamorous tasks that need to be done continuously if the roads are to continue to operate as safely and effectively as they are capable of doing. This is where the money would be spent by anyone who was truly interested in highway safety.

Energy

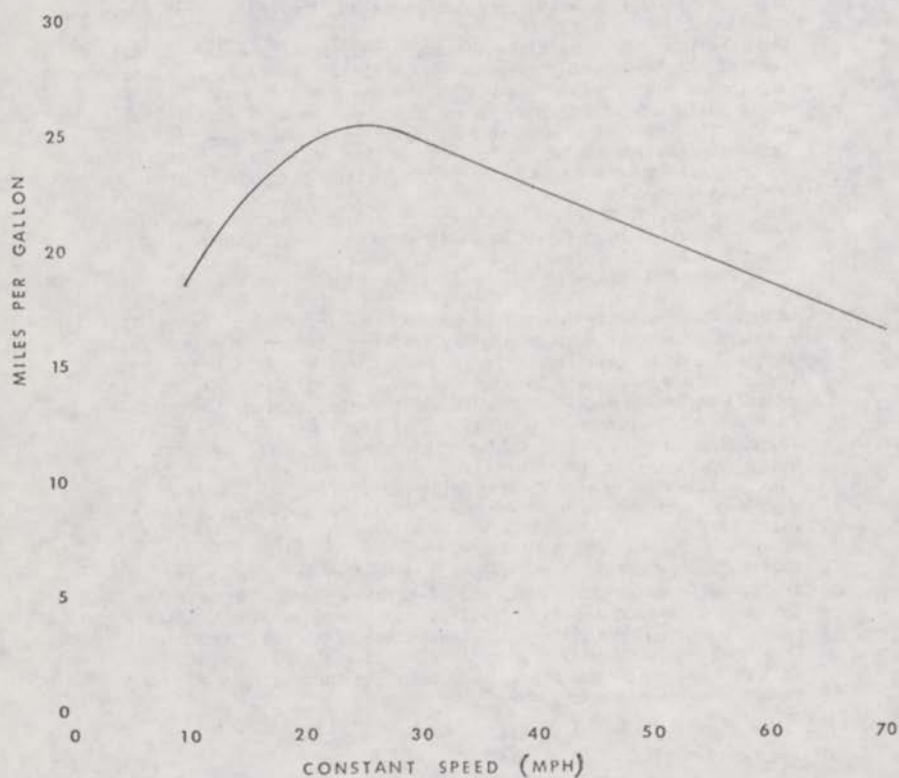
There is one final point -- a vital point indeed -- that heretofore has not been considered by transportation planners. I refer to the energy crisis. Every decision-maker should know that a decision to build a new road will result in an increase in the consumption of oil -- with all of the political and economic implications that go with oil consumption. We now know, beyond question, that new roads tend to lengthen trips and they generate new trips. There will, inevitably, be more vehicle-miles of travel after a road is built than there were before the road's construction, unless steps are taken to reduce travel. A vote for a new road is a vote for oil imports and for dollar outflows.

Some freeway defenders claim the new roads conserve energy because they eliminate wasteful stop-and-go driving. The claim is specious. Driving on high-speed roads wastes as much gasoline as driving in center city congestion. As Figure 2 shows, the most efficient consumption of fuel occurs at about 25 miles an hour -- a speed that many traffic engineers in large cities are able to maintain on arterial streets during peak hours. Freeway speeds of about 60 miles an hour consume gasoline at the same rate as 10 mile an hour speeds. Furthermore, even when freeways are used, much of the trip must still be made on local streets and the congestion that often develops at freeway on- and off-ramps contributes further to the energy wastage of automobiles.

We have long accepted waste, in general, as one factor of the American economy. Many people deplored our penchant for prodigality, but until recently the issue was a moral one. If urban freeways led to spread-out, low-density development (often called sprawl) at the expense of deteriorating center cities, the justification of transportation planners that they were only being responsive to what people want may have been deplored by a minority but it was accepted by most people. "Freedom of mobility" was the rallying cry of freeway promoters. This was the American way, and if the waste was inordinate, well, we were inordinately rich.

Now the energy crisis casts a new light on our wasteful ways. The issue is no longer simply one of morals. Each time we drive into a gas station and say, "Fill it up" we are sending dollars out of our country and into the treasuries of the oil producers. Those dollars then come back to America in exchange for some control of American business. The issue is increasingly becoming one of economic independence.

Speed vs Fuel Consumption



Source: Traffic Engineering Handbook
Figure 2

Where Do We Go From Here?

Now, we are not so much at the traditional crossroads, but rather at a place to make a U-turn. We must focus our efforts on discouraging, rather than encouraging, excessive travel. There are many reasons why an about-face in urban transportation policies is essential and why the time must be now: our present policies are extending travel without saving travel time; they are spreading, rather than alleviating, congestion; and they are fanning a smoldering energy crisis.

To discourage, instead of encourage, travel in cities requires only the resolution to do a job that must be done. There are neither problems of technique nor of finance. When transportation construction is curtailed, travel is curtailed; the relationship is direct, as countless studies have shown. But I am not advocating a do-nothing policy. Some roads are still needed. Public transportation is badly needed. Improvements to existing transportation systems are needed. I urge only that before decisions are made to construct new facilities, a full evaluation of the implications of those decisions should be required. We must have a national policy of reducing, rather than encouraging, automobile travel. An urban transportation program should reflect that policy.

The key to such a program is to focus on land use relationships that provide a full array of urban activity opportunities -- employment, shops, entertainment, schools, professional services -- intimately related to a full array of residential opportunities. "Opportunity", not "mobility", must be our lodestar. If people can satisfy their needs close to home, there is no obligation for the community to provide long-distance transportation for those needs. In planning for the new town of Milton Keynes in England, it was found that by dispersing employment in small clusters throughout the community, rather than concentrating the jobs in a central location, the need for streets could be reduced by 50%.²⁷ In a doctoral dissertation for the University of Michigan, Richard C. Harkness demonstrated that in an urban area made up of 50 neighborhood employment centers, if everyone worked at the center closest to home, then all work trips could be made on local streets with no need for either major highways or rapid transit.²⁸

In conclusion, then, I urge the Congress to take a fresh look at the implications of our existing urban transportation programs. Recognizing that new roads will exacerbate our critical energy problem while not achieving any of their promised objectives, the Congress should put the burden on the states to demonstrate that their transportation plans will not lead to any increase in

vehicle-miles of travel. The states should be required to develop land use plans that will minimize the need to travel, and the transportation elements of the plan should support that concept.

I'm not suggesting a popular course of action. Our habits of easy travel are deeply ingrained in the American character. But something far more important is still more deeply ingrained in that character: a determination to face up to any national problem, and to do what has to be done to solve that problem. I, for one, refuse to believe that we have become so fond of our luxuries that, to preserve "freedom of mobility" we would accept foreign economic domination. I am confident that every member of Congress shares that view.

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Senator STAFFORD. I wonder if Mr. Lamm, Mr. Orski and Mr. Carballo will join the panel?

Mr. Lamm, this Senator wasn't here when some of the earlier witnesses discussed matters. But from the conversation with Senator Domenici. I think we should start possibly by asking you to give us the Federal Highway Administration's perspective on the implementation of the urban systems program.

STATEMENT OF LES LAMM, EXECUTIVE DIRECTOR, FEDERAL HIGHWAY ADMINISTRATION

Mr. LAMM. Thank you, Senator Stafford.

As the Secretary mentioned yesterday when we were before the same subcommittee, the Department is pleased with the efforts that this subcommittee is making to find out what various segments of the transportation interests around the country feel is a necessary direction for highway programs in the future.

From my own point of view, we are certainly more than willing to cooperate as much as we can in helping you find answers to some of these problems. I have not been in the room for the full series of presentations this morning. I did sit through a few, and FHWA did have observers in the room who have told me about some of the issues. I would like to state a few statistics, and then respond to any particular questions, which you or the staff or any of the other witnesses this morning would like to ask.

From the point of view of the Federal Highway Administration, the administration of the Federal-aid urban system has been a very difficult process.

As you know the 1973 Highway Act changed many facets of the program, changed the extent of local participation in program development. In other words, it gave us many more partners than we traditionally had. It made a substantial amount of money, a much larger pool of funds available for urban highways than had ever been made available previously.

Most important it greatly increased the possible types of projects which could qualify for urban system funding. As a result in the 2 years since the 1973 act was passed, I would be the first to admit, progress in obligating funds under the Federal-aid urban system has been slower than we would have expected.

But given the extra flexibility and the extra options open for the dollars, I think the slowness is understandable. I wouldn't want to accuse one level of Government or one group of participants in the process for any part of the delays. To my way of thinking, it is just the normal slowness in getting an expanded program under way, when there are so many more people that have a role in program development.

What we are seeing now around the country is a good spirit of cooperation in nearly every State and in nearly every urbanized area. The local urban officials, except in a very small number of regions, have now determined who will represent the region in matters dealing with Federal-aid highway funds and with transit funds.

We have an acceptable designated planning agency in existence in just about every urbanized area. Also, in most urbanized areas, the availability of additional planning funds has permitted the staff

working at the local level to be bolstered to the point where the planning process is a much better technical process than it was even as late as three years ago. I really feel that in the future, the progress of the Federal-aid urban program will speed up.

Another factor which has influenced activities during fiscal 1973, has been the need to wind up some of the programs which disappeared in the 1973 Highway Act. For example, there was still a backlog of \$25 million or so of TOPICS funds which had not been obligated at the beginning of fiscal 1975. They have now all been obligated with the possible exception of maybe close out amounts of \$0.52 in one State or \$3.45 in another State. But the overwhelming majority of all of the available TOPICS funds have already been obligated and were not in a position where they lapsed.

Every TOPICS project that was approved during the fiscal year represented a trade off from a project which could have qualified for Federal-aid urban system funding. Every Federal-aid urban system project is a potential competitor for the type of improvement which is carried out under TOPICS programs.

Therefore, with the closing out of some other programs and the tooling up for the new program, I honestly feel that progress has been about as much as we can expect. During the first 2-years since the passage of the 1973 Highway Act, I truly believe that the State and local agencies have established the necessary working relationships and have set the stage for a continuing pattern of obligating funds in the future.

One thing which will help will be the continuation of a highway program level which is not set at an artificially low figure. As you know we have had discussions in this committee about the program level in fiscal 1976. It has not finally been determined. We would hope it would be sufficient to permit all local areas and all States to carry out any urban system projects which they have in mind. We would also intend to operate the Federal-aid program in fiscal 1976 so as to eliminate any artificial constraints on the urban system.

Last year if you recall, we had an internal administrative goal to produce \$250 million worth of obligations in the title II safety construction programs. I think most Congressmen would admit this is another worthy goal which was established as a potential tool in the 1973 highway legislation.

We were successful in 1975, in terms of obligating about \$440 million worth of title II construction programs. But the mere existence of that goal perhaps could be seen as a potential bar in the way of advancing some urban systems projects. We would hope that the program level would be sufficient and the goals would be broad enough to permit any local area in any State to come in with any urban system projects they wanted this year.

There has been reference to the activity in terms of substitute transit projects under the 1973 provision. Here again, from the point of view of the Department of Transportation, the activity has not been as great as we would hope up to this point.

There has been as of the end of fiscal year 1975, a little more than \$50 million transferred. During that period of time a pool of funds in excess of \$2 billion was theoretically available in the Federal-aid urban system. If all of that \$2 billion had been used and only \$50

million had gone to substitute transit projects, I would feel a lot worse than I do at this point.

But because of the delay in advancing all urban system projects the total amount obligated is in the range of \$680 million or so, in the overall program. I feel that even this slight progress in developing transit projects has been encouraging. We should see a step up of that in years to come.

It will be our intention—here again, we are joined in full partnership by the Urban Mass Transit Administration—it would be our joint aim to make sure that Federal regulations do not stand in the way of advancing projects either highway or transit projects, depending on the local and State preference for urban system funding.

I mentioned this yesterday in response to one of the questions submitted by the subcommittee. It is our intention to draft whatever administrative regulations we need in a way that would ease the completion of program goals rather than establishing additional roadblocks in the way of obtaining these goals.

I meant to give a little background of what we feel has been the progress to date. I didn't mean to take quite so much time, Senator, but there has been a lot of attention directed this morning to the way the Federal funds were used. I will let that statement stand for itself.

Senator STAFFORD. Thank you, Mr. Lamm.

Mr. Carballo, would you want to respond on behalf of the State transportation officials to Mr. Davis' criticism of the urban systems program as it is being carried out?

STATEMENT OF MANUEL CARBALLO, DEPUTY COMMISSIONER, NEW JERSEY DEPARTMENT OF TRANSPORTATION

Mr. CARBALLO. I would be happy to, Senator. I think it is fair to say that the question of criticism is an ironic one for me because my background may perhaps help inform this discussion. I think it might be helpful for the record to note that before becoming deputy commissioner of the State department of transportation in New Jersey, I served for 2 years as first deputy administrator and highway commissioner for the city of New York, as well as on the National League of Cities Legislative Committee.

I am now also concurrently vice chairman of the Delaware Port Authority. So, I can say that aside from attesting to my inability to hold a job for a long period of time, my background also attests to a certain relevant experience that is really very appropriate here.

This is one of the first panels I have sat on where people representing not only the different modes, but different levels of jurisdiction, have jointly testified. I think that in itself is a testimony to how far we have come in the last few years in bringing things together in a modal manner.

I think that as well as doing that it is probably quite appropriate in this year before the Bicentennial. We are also struggling not just with an allocation of responsibilities among transportation modes, but with an allocation of responsibilities within the Federal system. It is fair to say that the role of the States is one that has always been a strong one in the highway area, and a relatively weak one in the mass transit area.

We are beginning to see a shift in that. My own State of New Jersey has responsibilities not only for highways but essentially the State government provides all of the transit subsidies that are provided by general purpose, local governments within the State.

States like Connecticut and Maryland are also moving in that direction. So, as we look for that allocation of functions I think it is appropriate for us to recognize that this Federal system has had an inspired genius in allocating functions among the three jurisdictions—Federal, State, and local—based on how it fits best.

What we face in each of the different modal areas is slightly different. For instance, my own experience in dealing with urban system projects is a mixed one. The State of New Jersey, for instance, matches the local share. In other jurisdictions the local municipalities are required to provide the local share. We have had cases where the State has sought to have a road of regional interest put on the urban system. We have also had cases where we have had roads of regional interest in effect “de-initiated” by the municipality which under the provisions of the Federal law must initiate an urban system project.

In effect, what I am saying is in most cases the responsibility lies at many levels. We have had as many as 15 projects aborted by municipalities withdrawing their consent, which is required under the highway law. This is hardly a case of a State standing in the way of local officials, but vice versa. Conversely when I was in New York, I remember very clearly a situation in which the city wished to move ahead with a road construction project. The State at first was reluctant to agree. Then the project ran into difficulties because of Federal design standards.

The question of Federal design standards, I think, is a very important one. The Congress was quite enlightened in recognizing the needs of urban areas in creating an urban system program. What happened was that a highway program was really not tailored to meeting the needs of streets in cities, was superimposed on an existing street system in urban areas.

The result was very often an unrealistic design that couldn't possibly be applied. For instance, a geometric requirement, in case the street that is running between highly developed land uses, indeed, even skyscrapers, could lead to the ridiculous conclusion that one has to widen the street at the expense of several million dollars worth of buildings.

What is needed in this area is flexibility, recognition that if we make an improvement in the safety of a street through, for instance, increasing its skid resistance, or improving its geometric design, not to the optimum, that is a valid investment of the Federal and local funds. That is a change we are earnestly seeking.

In the transit area, the role of the States is an additional area that needs to be considered very thoroughly by Congress. A while ago, in 1973, it was considered rather unusual that the States should have a role. If the Federal highway program, for instance, has tended to have a bias in favor of the States, it is fair to say that the Federal transit program has tended to have a bias toward local jurisdictions.

To some degree, states have had great difficulty in establishing their place in the transit program, even when they themselves have invested great resources and pursued objectives aggressively. As a result of

that, I think that the emphasis now correctly coming around to a recognition that in some States and in some cases, the State is the appropriate vehicle for transit projects, as it is the appropriate vehicle for highway projects.

I refer to one of our counties in New Jersey, with 60 municipalities in it, and less than a million and a half people. To build just about anything in that county, which is contingent on the approval of and agreement of any combination of those 60 municipalities, is the equivalent of creating a world state. It is virtually impossible. I think what needs to be created is a balance between those interests which are statewide in nature, regional in nature and purely local in nature. In that context the States have a very significant role to play. As in all relationships, there will be times when there will be friction among the various levels of government.

But as Justice Brandeis said, the States are the laboratories of the Republic. I think we need to improve and strengthen those laboratories and extend the responsibility to the States.

Senator STAFFORD. Thank you very much.

Mr. Lamm, I would like to come back and ask if you could respond to a criticism that the Federal Highway Administration standards for roads on the urban system do not fit the needs of such roles; that the Federal Highway Administration standards are appropriate for expressways, but not for city streets.

Mr. LAMM. Senator Stafford, there are very few Federal standards. The normal engineering and other design standards are developed jointly by a committee representing several States and adopted by the AASHTO organization, then given Federal blessing by ourselves after the AASHTO adoption.

The standards are not precise enough to define that only certain figures will be acceptable in every known case. The instance that Mr. Carballo mentioned is quite familiar to me.

We have had a number of continuing discussions with the State of New York and with New York City officials. We have been able to use urban system funding for some projects which we originally at the field level turned down because they appeared to be gross deviations from existing standards.

One trade off which we always make is to be sure that we are not sacrificing safety in the interests of permitting a highway project to qualify for Federal funding. The standard on lane width in most rural areas and on most high-speed highways, is a 12-foot lane which gives a good option to a driver to swerve a little bit and still not be in an accident situation.

In lesser travelled roads, particularly in rural areas, and even in lower speed urban streets, you can get by with a 10-foot pavement width. But below 10 feet, given the size of most vehicles in today's traffic stream, the traffic characteristics represent an unfair trade off between safety and traveling convenience.

We have looked at the standards such as the standards of lane width, much more closely than we would a standard which has no trade off other than economics. We have through our continuing discussions with the New York people since Mr. Carballo transferred over to the State of New Jersey, if my information is up-to-date—more than 70 proposed projects. We have been able to finance in excess of 40 right now, with discussions still going on in many of the other 30.

So that the program certainly is not dead because of an unwillingness or lack of willingness to concede on our part on adopting standards of a lesser degree.

We have encouraged the field offices to adopt a problem solving approach with any of the projects which do come in from the local jurisdictions, particularly in the urban system programs.

We have much more latitude now to deviate from the predominant standard than we would have had a few years ago.

Senator STAFFORD. Thank you very much.

Mr. PIKARSKY. While I am currently with the American Public Transit Authority, I had been Commissioner of Public Works for Chicago. For 10 years, I have had some experience in dealing with the Federal Highway Administration in this particular field.

While I think it is encouraging for Mr. Lamm to indicate their willingness to modify their provisions, I think it came from just such committee and subcommittee hearings. I recall many, many months of delay in road reconstruction within the Chicago area, where the standards were all being developed by the AASHTO organization or endorsed by the Federal provision requiring 12-foot lane widths in city streets where the speeds are quite small.

In the outer drives in the city of Chicago, there was a desire to modify shoulders and have refuse bays occasionally for the protection of emergency vehicles or for the safety of all vehicles, but not to take parklands at that point. There were many, many months of delay. I would encourage this committee to monitor this carefully. Certainly there has been a change of policy and attitude generally in the Department of Transportation in a favorable direction. But it only comes through oversights.

Senator STAFFORD. Mr. Davis?

Mr. DAVIS. I would like to say something. If the States are the laboratories of the republics. Sometimes the cities are the victims of that laboratory investigation. I wouldn't want the record to stand unmodified that in areas where there is multiplicity, simply nothing can be done except by the States.

In our case in King County, Washington, there are over 30 jurisdictions. We established by local consensus of the jurisdictions a board of six, which represented an equitable interest of all those interests, including the transit interest. That board makes the fund allocation decisions for the whole community. We think it is possible to make local decisions in an effective way.

It isn't necessary for the State to be a big brother because there are many municipalities. There are other institutions available or can be created that can handle that situation.

I would like to congratulate FHWA for being sensitive in adjusting standards to local needs. But I do wonder. In the illustration I cited, our transit people in Seattle are most reluctant to use the urban systems fund for transit. We are using it for shelter addition. To require that each shelter site plan be approved by the State when you are building 1,200 shelters requires a lot of paperwork.

They would much prefer to deal with UMTA on this program because UMTA makes a plan and the plans don't have to go to that point. The amount of paperwork required in handling that process between communities and the State—I don't know much about the

relationship beyond that—sometimes is a terrific deterrent in producing real action. I think the one I cited was a classic case.

Senator STAFFORD. Thank you, Mr. Davis.

Senator BENTSEN (chairman of the subcommittee, presiding). I apologize, gentlemen, for the lateness of my arrival. But that is the problem in trying to work on two committees at the same time.

Mr. Morris, you suggested in the new transportation project we ought to have, in effect, an energy impact statement on it. We already have to make one on an environmental impact statement. The President is talking about an inflationary impact statement. Are you talking about another layering of reforce in paperwork?

Mr. MORRIS. No, Senator. I did not specifically suggest an energy impact statement. What I suggested was that a State be required to demonstrate that the proposed plan would not result in additional vehicle-miles of travel. This of course, relates specifically to the energy issue. It seems to me that the consumption of energy has to be a critical ingredient in the transportation planning process.

To continue to plan for new highways, which we know are going to generate more vehicle-miles of travel or are going to generate new trips, is simply counterproductive in the existing circumstances. I am not looking for a new statement. I am simply looking for a new input into the transportation planning process.

Senator BENTSEN. Mr. Orski?

**STATEMENT OF C. KENNETH ORSKI, ASSOCIATE ADMINISTRATOR,
OFFICE OF POLICY AND PROGRAMS DEVELOPMENT, URBAN MASS
TRANSPORTATION ADMINISTRATION**

Mr. ORSKI. It might be appropriate to point out that UMTA in cooperation with the Federal Highway Administration, is now envisioning a new requirement, a transportation system management requirement, whose purpose would be to achieve more efficiency in the use of existing transportation facilities.

What Mr. Davis was referring to as a reduction in VMT's, vehicle-miles of travel, might be a consequence of this new policy direction in the Department of Transportation a policy which will require local areas to consider an array of methods by which highways and transit facilities can be used in a more productive and more efficient way.

By transportation system management we mean such measures as preferential treatment of buses, parking management, the use of smaller transit vehicles and, in general, various ways of using the existing transportation resources in a more effective manner.

Senator BENTSEN. Mr. Orski, the National League of Cities calls for funding about \$4.5 billion a year, as I understand as their request for urban mass transit. How does the administration respond to that kind of level of funding?

Mr. ORSKI. What was the figure, Mr. Chairman?

Senator BENTSEN. \$4.5 billion, a year, as I understand.

Mr. ORSKI. The transit needs are being evaluated and reassessed continuously within UMTA. As you know, the administration has pointed out on several occasions in the past that it considered the \$12

billion available under NMTA, the National Mass Transportation Assistance Act of 1974, to be adequate for the fiscal years 1975 through 1980.

However, as I said, these figures are being reassessed and reevaluated continuously. Personally, I believe the presently available funds will not be sufficient to meet the needs of transit within that time period. Whether the figure you quoted reflects the true "needs" of transit or whether it is a smaller amount, remains to be seen.

We have this question very much on our minds. We will presumably be testifying on this matter, sometime next year.

Senator BENTSEN. Mr. Orski, I wonder if I can get a more definitive answer. We all know that the needs are there and that they are substantial. My question is when they recommend \$4.5 billion a year for urban mass transit, what is the administration's opinion?

Mr. ORSKI. We believe this amount to be excessive.

Senator BENTSEN. That is what I wanted.

Gentlemen of the panel, the administration has set up a proposal, a new definition for smaller urban areas which consist of areas of 5,000 and above, not in urbanized areas. That means they compete for rural funds instead of urban funds. Do you generally approve of that new designation or not? Does anyone have any feelings on that?

Mr. PIKARSKY. If I might comment, I would suggest that that new designation was an attempt to get the greatest support for passing the bill in Congress. That, generally, is how the highway bill has been modified in the past in population requirements.

I think that is one which is a pragmatic decision to be made on what has the greatest constituency in the best interest of the Nation.

Mr. CARBALLO. Mr. Chairman, AASHTO is also in favor of that modification.

Senator BENTSEN. Any other comments?

Mr. DAVIS. It has been sometimes used in way of diverting urban funds in some States to smaller cities. I am afraid that the bill would encourage that because only 75 percent of the amount which urbanized areas would be entitled to by population will necessarily go to them. And with some States that will simply cause a further siphoning of money to small cities from the larger areas.

Senator BENTSEN. It seems to me that the small cities now are competing for rural funds instead of urban funds.

Mr. DAVIS. At what point is the break made?

Senator BENTSEN. 5,000 and above, not in urbanized areas; 5 to 50.

Mr. LAMM. Senator, the intention there was not to deal with the pragmatic problem. It was a technical recommendation based on our evaluation of the relative scope and type of transportation demands which are imposed on large cities, compared to those imposed on smaller cities.

We felt that the proper break point to make in determining which were the rural or lesser than heavy urban demands, was at the small city level of 50,000.

Senator BENTSEN. Along those lines, how do you feel about the administration's proposals also to deemphasize urban interstate segments and to upgrade some of the rural segments?

Mr. LAMM. We wouldn't characterize that as a deemphasis. The intention of that provision is to permit a greater productivity on the part of a small annual interstate authorization, in that the current existing rural gaps can be closed more quickly if more money is so devoted.

The intention of the legislation is to put a fiscal premium on closing these gaps and thereby tie the cities together at an earlier date than they would have otherwise.

I would not want to characterize the routes which would be included in the second category as being less desirous. On the criterion of linking up cities, they are less obvious. They are less necessary. But they are not less desirous as elements of the interstate system.

Senator BENTSEN. You cut back on the urban funds in the administration's highway bill, from \$1.1 billion to \$800 million. Is that because of primarily budgetary reasons or is that from real feel for the need?

Mr. LAMM. If you were to compare the urban and the rural category, the comparison of \$800 million to \$1 billion reflects the fact that the small cities are now lumped in the rural category. They have themselves a backlog of highway and transit related problems.

Senator BENTSEN. You feel that correlates to the reduction?

Mr. LAMM. Yes, sir.

Senator BENTSEN. Mr. Davis?

Mr. DAVIS. Could I ask Mr. Lamm, if he could comment on the 75-percent guarantee passed through instead of the 100-percent? Why that change?

Mr. LAMM. What section are you talking about there?

Mr. DAVIS. 123 of your bill.

Mr. LAMM. This provision was one not thoroughly debated, at least in a debate that included myself. I am certain there are others in the department who could give a more complete answer and perhaps it would be best to ask this for the record, Mr. Chairman.

Senator BENTSEN. We will submit your question for the record on that.

[The information requested follows:]

The rationale for proposing that the States be required to allocate to urbanized areas of 200,000 population or more only 75 percent of the urban system funds attributable to those areas is that the States have responsibility for significant mileage of highways in these urbanized areas and need a source of funding for these roads.

Without limiting the percent to be allocated to urbanized areas over 200,000 population, many States would have little or no funds available to meet their responsibilities for highways in those areas. They would have to make most if not all funds available for projects selected by local officials.

If there were no 75 percent limitation, Arizona, New Mexico, Delaware, Hawaii, Maryland, and Rhode Island would have to make 100 percent of the urban system funds available for projects selected by local officials. Another 8 States would be required to make more than 90 percent of the funds available and an additional 10 States would be required to make between 80 and 90 percent of the funds available.

The 75 percent limitation in effect, assures the States of at least 25 percent of the urban system funds to meet State responsibilities for highways in urbanized areas over 200,000 population.

Senator BENTSEN. Let me ask for comments here, Mr. Davis, about the evolution of a true trust fund, true transportation trust fund. I don't suppose that calls for as far as putting UMTA money in it?

Mr. DAVIS. I believe our NLC legislative committee had a great deal of difficulty with that issue. I know many have been debating its various points of view. Our first interest is securing an adequate level of funding. The mechanism is of secondary interest. We would be reluctant to go to a mechanism which imposes FHWH procedures.

I am not sure that the league has a stronger position than that. The funding level is most important and there is a desire for minimizing unnecessary paperwork, which may be more important than the exact nature of the national system for providing financing.

Senator BENTSEN. That answer is not surprising.

Mr. CARBALLO. AASHTO has not yet taken a position on this. Although, that question is being reviewed by the committee upon which I sit in trying to formulate the proposed national transportation policy.

However, I think I can say that in a sense there is a certain caution that flows from getting too wrapped up around the institutional arrangement as opposed to discussing the question of what is an equitable basis for raising the funds that are needed; what is the equitable basis upon which the funds will be distributed and what is the level of funds that will be required. I think it would be unfortunate if any sort of debate arose with regard to what is really nothing more than a bookkeeping mechanism, in fact, instead of a more substantive debate as to exactly where we are going in the area of transportation in this country, what is needed to attain that in the way of dollars and how we can do that most fairly on the taxing end on one hand, and the disbursement on the other.

Senator BENTSEN. I think it is more than bookkeeping. Let me ask you about the National League of Cities that comments that the States often frustrate the use of the urban funds for transit. Is that the States' fault or is there something basically wrong with the law itself?

Mr. CARBALLO. In terms of whether the States frustrate the use of funds for transit, I think the answer has to depend very much on the jurisdiction involved. It is very difficult to address that broadly.

Senator BENTSEN. I just say this; most major cities say the State frustrates them on it.

Mr. CARBALLO. I would say, for instance, in the transit area of the State of New Jersey, which I am familiar with, the local cities have no role in the transit. The State is the transit operator and the transit subsidizer. So there is every interest on the part of the State to assure that urban systems funds are used on that basis. In the case of transfers that have been made both in New York State and in Massachusetts, they have been made with the full cooperation and support of the State agencies.

I think the problem is to make that kind of generalization with regard to all States. I think the machinery exists within the bill to assure there is a reasonable balance of roles among the local interests, the State interests and indeed, the case of the interstate, the Federal interest.

Mr. DAVIS. We would like to supply for your information a report that is just now in progress of what the experience has been in some places that would illustrate the points we have made. We hope to have a preliminary report in September and maybe a final one at the end of the year.

Senator BENTSEN. I would like to have that.

Mr. GAMBACCINI. I represent the American Public Transit Association. With respect to your question about whether UMTA funds ought to be merged with the Highway Trust Fund, it is our position that they should not. We are just barely coming into our own in the sufficient funding levels to begin to cope. We, of course, disagree with Mr. Orski's position that the recommended level of funding is excessive. We think it may be insufficient. The funding level for transit probably would be justified at a much higher level.

With respect to the trust fund, it is our position that has been an effective mechanism for funding long-term projects. But we certainly stress the importance of increased flexibility in the use of highway trust funds for local decisionmaking for transportation purposes broadly.

With respect to whether it should be a unified transportation trust fund, we have not reached a conclusion or a position. We think to the extent that changes suggested in the proposed administration bill on the highway 1975 act permit greater flexibility. They are a step in the direction of a single transportation trust fund. These changes should be encouraged and supported.

In effect, we are saying let's keep our options open; keep the mechanism alive, but most importantly and simultaneously, let's expedite conceptual thinking on national transportation policy formulation; hopefully, at a point as we become more sophisticated, above vital relationships in function and policy such as related to energy and a whole host of other critical dimensions. We can also be changing the funding mechanism to suit.

Senator BENTSEN. Thank you very much, gentlemen. I think the hearing has been productive and they have been helpful to us. We appreciate very much your attendance.

We stand in recess at this time.

[Whereupon, at 11:50 a.m., the subcommittee recessed, to reconvene 9:30 a.m. Monday, July 21, 1975.]

[A statement from the Highway Users Federation and the report referred to by Mr. Bridwell follows:]

HIGHWAY USERS FEDERATION



for Safety and Mobility

OFFICE OF THE PRESIDENT

July 18, 1975

The Honorable Lloyd Bentsen
Chairman, Subcommittee on Transportation
Committee on Public Works
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

In regard to your hearing today on urban transportation matters, we would like to pass along some facts that might stimulate useful discussion.

Urban Travel Costs and Energy Efficiency

Attachment 1 deals with the economic costs of different modes of urban transportation. It shows that the most economic way to commute in large cities is by carpool and bus.

Attachment 2 shows the relative energy efficiencies of urban transportation modes. It indicates that carpools and buses are among the most energy efficient means of transportation over the course of a typical day.

These facts lead to the inevitable question of whether the emphasis in urban transportation improvement shouldn't, for the sake of minimizing economic and energy costs, concentrate on encouraging those kinds of transportation which are inherently most efficient -- pooling and bus transit.

Diversion of Auto Trips to Transit

Our studies of material provided by urban areas and the 1974 National Transportation Report indicate that the proposed investment of more than \$61 billion in transit improvement would have the net effect of increasing transit's share of urban passenger traffic from 5.2 percent to 6.2 percent in 1990. For each new transit passenger between now and 1990, there will be five additional automobile passengers in urban areas. While large investment might be justified in the interest of improving transit service, it is a questionable investment for the purposes of reducing automobile vehicle miles of travel and suggests that there is no way to avoid necessary improvements to urban street systems and more efficient use of the vehicles that will be on those streets.

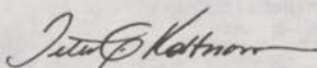
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Importance of Trucks in Urban Areas

It is often overlooked that trucks provide an essential service to every aspect of urban life. Attachment 3 indicates that over 40 percent of truck trips provide services to residential areas -- services that can be provided in no other way. Similarly, the location of retail, government and manufacturing facilities is increasingly widespread in urban areas, making these facilities heavily dependent on trucks. The question can reasonably be asked whether increasing urbanization and economic activity in urban areas can take place without the kinds of road and street improvements that will accommodate the related truck travel.

Thank you for the opportunity to present this information.

Sincerely,



Peter G. Koltnow

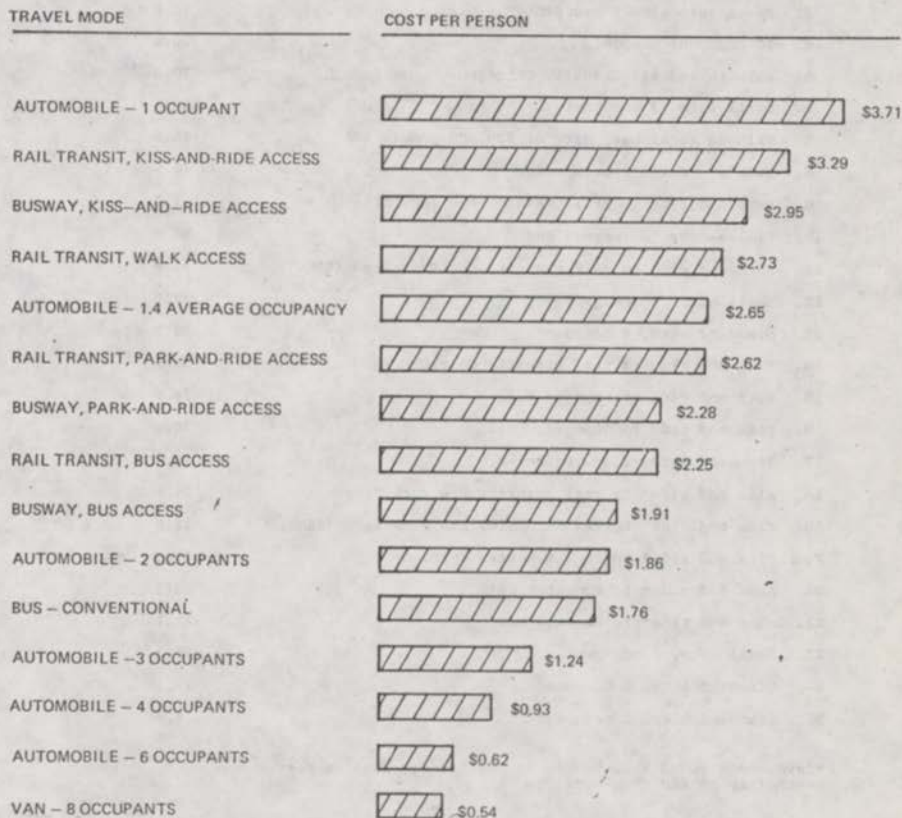
Attachments

ECONOMIC COST OF ONE-WAY URBAN CBD COMMUTER TRIPS — COMBINED MODES

URBAN AREAS GREATER THAN 1,000,000 POPULATION

10 — MILE TRIP

1974

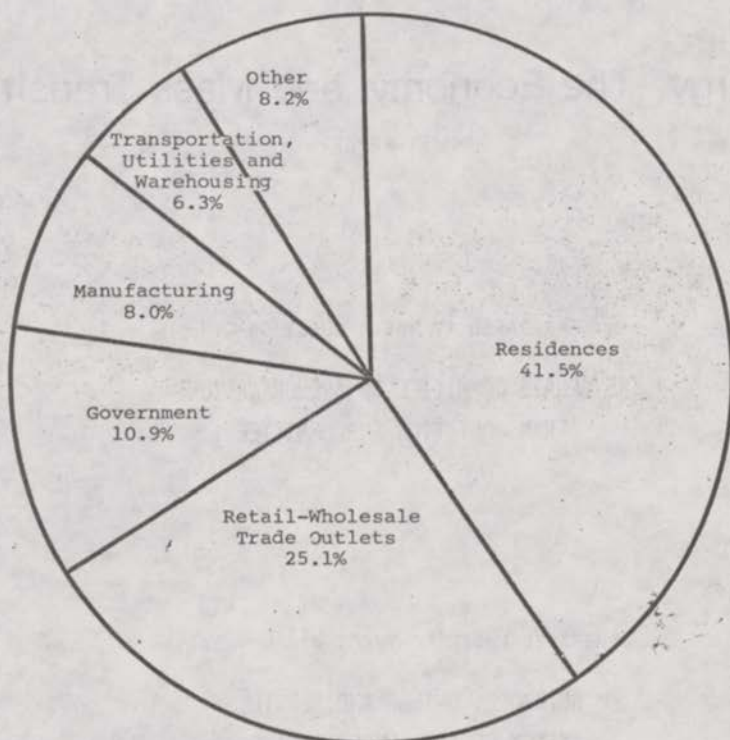


ENERGY EFFICIENCIES FOR A
TYPICAL CBD WORK TRIP
1974

Mode	Passenger Miles/Gallon
1. Walk-in to rail transit, New York City	109.0
2. Walk to local bus, city of 3 million population	93.1
3. Small auto with 4 occupants	71.8
4. 10 occupant vanpool	70.0
5. Walk-in to rail transit, Chicago	70.0
6. Small auto, 3 occupants	55.1
7. Walk to local bus, city of 300,000 population	46.6
8. Standard auto, 5 occupants	44.9
9. Park and ride to rail transit, New York City	41.7
10. Dial-a-ride to express bus	39.8
11. Park and ride to rail transit, San Francisco (BART)	38.8
12. Small auto, 2 occupants	37.8
13. Standard auto, 4 occupants	36.7
14. Park and ride to rail transit, Chicago	35.6
15. Park and ride to express bus	34.6
16. Park and ride to commuter rail	30.6
17. Standard auto, 3 occupants	28.2
18. Kiss and ride* to rail transit, New York City	24.6
19. Kiss and ride* to rail transit, San Francisco (BART)	23.6
20. Kiss and ride* to rail transit, Chicago	22.3
21. Kiss and ride* to commuter rail	20.3
22. Kiss and ride* to express bus	21.9
23. Small auto, 1 occupant	19.3
24. Standard auto, 2 occupants	19.3
25. Standard auto, 1 occupant	9.9

*involves a round trip by car to the transit station for each trip to and from work

URBAN TRUCK TRIP DESTINATIONS



UNITED STATES CONGRESS

Office of Technology Assessment

Energy, The Economy, and Mass Transit

SUMMARY REPORT

PREPARED AT THE REQUEST OF
THE SENATE COMMITTEE ON APPROPRIATIONS
TRANSPORTATION SUBCOMMITTEE

PREPARED UNDER CONTRACT OTA C-4 BY

SKIDMORE, OWINGS AND MERRILL
SYSTEM DESIGN CONCEPTS, INC.
WASHINGTON, D.C.

JUNE 1975

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June 18, 1975

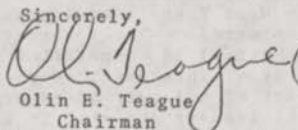
The Honorable John L. McClellan
 Chairman
 Committee on Appropriations
 United States Senate
 Washington, D. C. 20510

Dear Mr. Chairman:

On behalf of the Technology Assessment Board, we are pleased to forward to you the following summary report on Energy, the Economy and Mass Transit. This is in accordance with your request to the Office of Technology Assessment dated September 27, 1974.

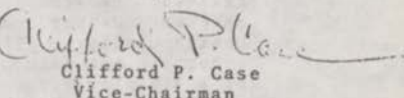
This report is being made available to your Committee in agreement with Public Law 92-484.

Sincerely,



Olin E. Teague
 Chairman

Sincerely,



Clifford P. Case
 Vice-Chairman

Technology Assessment Board Technology Assessment Board

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Congress of the United States
OFFICE OF TECHNOLOGY ASSESSMENT
WASHINGTON, D.C. 20510EMILIO Q. DADDARIO
DIRECTORDANIEL V. DE SIMONE
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June 18, 1975

The Honorable Olin E. Teague
Chairman of the Board
Office of Technology Assessment
United States Congress
Washington, D. C. 20510

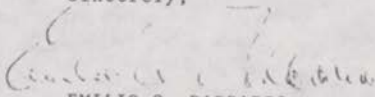
Dear Mr. Chairman:

In response to the letter of September 27, 1974, from Senator John L. McClellan, Chairman, Senate Committee on Appropriations, the Office of Technology Assessment is pleased to forward this summary report, Energy, the Economy and Mass Transit.

This report was performed under the general direction of OTA's transportation group, headed by Dr. Gretchen S. Kolsrud, and our Urban Mass Transit Advisory Panel which reviewed the work in progress. The contractors were Skidmore, Owings and Merrill in cooperation with System Design Concepts. It is of interest to note that this report is actually part of a larger assessment on Community Planning for Mass Transit and that it was prepared to be of assistance during hearings to be held by the Transportation Subcommittee of the Senate Appropriations Committee.

I am pleased to submit this report to you and to express my appreciation to all of those who contributed to it.

Sincerely,


EMILIO Q. DADDARIO
Director

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United States Senate

COMMITTEE ON APPROPRIATIONS
 WASHINGTON, D.C. 20510

September 27, 1974

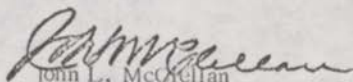
The Honorable Edward M. Kennedy
 Chairman
 Technology Assessment Board
 Washington, D. C. 20510

Dear Mr. Chairman:

On behalf of Senator Robert C. Byrd, Chairman of the Transportation Subcommittee, and Senator Clifford P. Case, the Subcommittee's Ranking Minority Member, I am transmitting an attached suggested revision to the Mass Transit Assessments you presently have underway.

With kindest personal regards, I am

Sincerely,


 John L. McClellan
 Chairman

JLM:cej

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United States Senate

COMMITTEE ON APPROPRIATIONS
 WASHINGTON, D.C. 20510

September 10, 1974

Honorable John L. McClellan
 Chairman
 Committee on Appropriations
 United States Senate
 Washington, D. C. 20510

Dear Mr. Chairman:

We would like to enlist your support for an increase in the scope of the urban mass transportation assessments currently being conducted for the Committee by the Office of Technology Assessment. As you will recall, one of these assessments is concerned with the question of the degree of automation which is technically feasible, economically justifiable or otherwise appropriate to rail rapid transit. The second assessment addresses the process by which communities select, plan and implement a new transit system or modernize an existing one.

While the need for these studies of conventional rail transit remains unchanged, there have been significant developments since the date of our original request to the Office of Technology Assessment which indicate that the coverage of the assessments should be expanded in two directions.

--First, it seems clear that we will be required to deal with the issue of "personal rapid transit" and related high technology projects earlier and in greater depth than had been anticipated.

--Second, the increasingly serious condition of the economy suggests that these assessments should be expanded to consider the development and potential of urban mass transit under conditions in which federal funding may be severely decreased -- or greatly increased in the event that unemployment becomes an overriding problem.

To expand on the first point, communities (such as Minneapolis and Las Vegas) are showing increasing interest in new types of fixed guideway systems. Personal rapid transit (PRT) systems are increasingly discussed as alternatives to more conventional rail transit. Implementation of new technologies may be proposed such as magnetically levitated vehicles. The considerable effort underway in other countries to advance the state of the art in fixed guideway systems should be further investigated. The current assessments do address some of these issues. However, if addressed

SENATE COMMITTEE ON APPROPRIATIONS

SEP 20 1974

they lie at the boundaries of the ongoing assessments rather than being fully included in the scope of work.

Concerning the second suggestion for expanding the assessments already underway, the economic picture has changed greatly since these assessments were initiated. As you know, a major purpose of a technology assessment is to identify policy alternatives and quantify the probable effects of such alternatives. Certainly, these assessments should address the full range of contingencies affecting policy alternatives and their impacts. Examples of varying economic outlooks that should be considered are as follows:

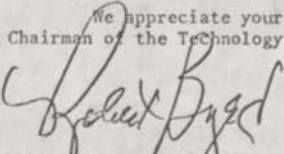
1. A revived fuel shortage leading to greatly increased emphasis (and funds for) mass transit. How much of the additional funds should be spent for fixed guideway transit, including personal rapid transit? How would R and D be affected? Would private industry have the capacity to support increased demands upon it?
2. A severe recession or actual depression. Should major public works projects be initiated in the mass transit field? What would be the consequences of such projects? On the other hand, if funds for major transit projects were severely curtailed, how quickly could communities now planning or building new transit systems alter their plans? What are the probabilities associated with such a future? Are they sufficiently high that communities should be encouraged to place more emphasis on staging the development of new transit systems so that working subsystems are obtained if development of the entire system is interrupted?

To summarize, we feel the needs of the Committee will be best served by extending the current assessment efforts. These extensions would

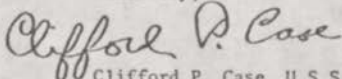
--increase the range of technologies under assessment; and,

--permit assessment of the interrelationships between alternate economic futures and a variety of mass transit policy alternatives.

We appreciate your assistance in transmitting this request to the Chairman of the Technology Assessment Board.


Robert C. Byrd, U.S.S.
Chairman, Transportation
Appropriations Subcommittee

Sincerely,



Clifford P. Case, U.S.S.
Ranking Minority Member
Transportation Appropriations
Subcommittee

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SUMMARY OF MAJOR FINDINGSPurpose of the Study

This report summarizes the results of a study entitled Energy, the Economy, and Mass Transit which was sponsored by the Office of Technology Assessment. The United States Senate Committee on Appropriations requested that the study be undertaken on behalf of its Transportation Subcommittee.

Responding to increasingly serious energy and economic conditions the Committee asked the Office of Technology Assessment to examine the following basic issues:

- How would future changes in the supply of energy (and energy prices) affect transit patronage, the Federal transit program, and the transit industry?
- What roles could transit play in a program to offset a severe recession or depression?
- How would the economy and urban transit be affected if transit funds were sharply reduced as part of a general anti-inflationary program?

The study was designed to provide answers to these questions and to evaluate the ways in which Federal policy and programs relate to and are affected by national energy and economic policy. Although the study's major concern was with short to medium, rather than long-term, conditions, some of the policies discussed have long-term implications. The study had the following objectives:

- To evaluate the impact of alternative future economic conditions on the public transit sector.
- To evaluate the impact of alternative future energy conservation measures or shortages on the public transit sector.
- To define alternative transportation policies for responding to various economic and energy conditions.
- To assess how effectively these transportation policies respond to the economic and energy conditions and appraise the capacity of Federal and local governments to carry out the effective policies.

This study is related to An Assessment of Community Planning for Mass Transit, a project which the Office of Technology Assessment initiated in July of 1974. The primary objective of that project was to evaluate the process by which U.S. metropolitan areas make decisions about the development or modernization of rail transit systems. In early December 1974, after much of the field work had been done in the nine metropolitan areas 1/ examined by the study, OTA's consultants, Skidmore, Owings & Merrill and System Design Concepts, Inc. were asked to undertake this additional work on the relationships between energy, the economy and mass transit. Each study has benefitted from work done on the other, and final reports on both projects will be completed in July of 1975.

Summary of Major Findings

The report on Energy, the Economy, and Mass Transit contains a number of findings regarding recent trends in the transit industry; the effects of current economic and energy conditions on the use of transit, and the relative merits of adopting alternative transportation strategies to increase transit use and achieve energy conservation objectives. Although not all these findings are discussed in this summary, the major ones are highlighted below.

Recent Trends in the Transit Industry

- Transit ridership declined each year from the end of World War II to 1972. A large number of factors contributed to this decline. These include: increasing affluence and automobile ownership; decreasing density of suburban development coupled with a pattern of scattering of development and segregation of different land uses; improvements to highways; lack of improvements to transit; deterioration of the quality of transit service; increases in the real dollar costs of transit; and decreases in the real dollar costs of automobile ownership and operation.
- The decline in transit ridership halted in 1973. The last three months of that year all showed increases over the previous year. Ridership in 1974 was up almost 6% over 1973. This reversal appears to have been due primarily, but not exclusively, to the gasoline shortage.

1/ Atlanta, Boston, Chicago, Denver, Los Angeles, Minneapolis, San Francisco, Seattle and Washington, D.C.

-3-

- Nationally, transit fares have decreased in real dollar terms over the last four years, reversing the long term post World War II trend. Fares have been held relatively constant with some actual decreases, due largely to public take-overs of systems and decisions to assume public responsibility for operating losses. The recent real dollar fare decreases, together with some overall service improvements, contributed to the 1973-74 reversal in the decline of transit.
- Scattered recent evidence indicates, however, that an end to the gasoline shortage, together with the recession, have resulted in slight transit ridership declines in the last few months in some cities.

Effects of Economic Conditions on Mass Transit Ridership

- Relatively large changes in the unemployment rate produce relatively small changes in transit ridership. For example, an increase in the unemployment rate from 5% to 7.5% causes a decline in transit ridership of about 2%.
- Reduction in personal income during a recession or depression causes no significant shift of travel from automobile to transit.
- The primary effect of economic downturns on personal travel is to decrease work trips by both auto and transit. Households in which the head-of-household is unemployed will make about as many trips for non-work purposes as households in which the head-of-household is employed.
- The effects of a recession or depression on transit operators is relatively mild. Because a high proportion of the loss in ridership that occurs during a prolonged economic downturn develops during the peak period, it may be possible to reduce operating costs by cutting back on peak period operations. However, other factors, such as labor agreements or public pressure, may limit the size of the reductions that actually could be achieved.

Employment Effects of Investment in Mass Transit

- Investment in transit results in about 80 man-years of employment per million dollars invested. This includes the full multiplier effect of the investment. This approximate level of employment is achieved whether the investment is in bus or rail rolling stock, construction of new fixed guideways, or through increases in transit operations. Another study has indicated that mass transit construction generates 3% more employment than highway construction.

- Increased investment in transit operations can generate additional employment within a few months, and the purchase of new buses or rail cars can generate new jobs within a year. However, it is not likely that increased expenditures on rapid transit construction will have significant employment effects within two years due to the long lead time required for planning, design, financing, etc.
- Investment in improved transit operations will result in local employment gains. Investment in buses or new rail cars will tend to distribute employment effects nationally rather than locally.
- Investment in fixed guideway construction has very localized employment effects. Over 1% of total metropolitan employment can be traced to such construction in Washington, D.C.

Capacity of Transit Industry to Respond to Increased Investment in Transit

- Transit rolling stock manufacturers can rapidly increase production output if demand requires. The transit fleet could be doubled nationally within five years if a firm commitment were made to do so.
- Manufacturers of bus rolling stock are handicapped by the tendency for rush orders to be concentrated at the end of the fiscal year due largely to the way in which grant approvals are administered by UMTA. This may restrict competitive bidding and affect prices adversely.
- Prices of rolling stock are adversely affected by the lack of standardized specifications. There are nearly 1,600 options available for transit buses (not including interior and finish options), which could account for up to 25% of the purchase price of a \$60,000 bus.

Relationship of Energy to Mass Transit

- Transit's share of total energy consumption is very low. Mass transit and intercity buses consume only 1% of the total energy consumed by transportation in the U.S. Automobiles in urban areas consume 34.2% of total transportation energy. The percentage of urban passenger transportation fuel that autos consume is 98%.

- The energy efficiency of transit also is higher than automobiles. During the off-peak period a transit bus with 30 passengers is six times as efficient as the auto which carries an average of 1.4 people.
- The energy efficiency of heavy rail transit systems is high. However, the construction of fixed guideway systems consumes a great deal of energy. Construction of the BART system consumed 46% of the energy the system will use over the next 50 years.
- During the recent oil embargo, it appears that most people continued to use the automobile for work trips and basic shopping trips but cut back on discretionary travel rather than maintaining their previous levels of mobility by shifting to the transit mode.
- Between 1950 and 1970 auto transportation increased its share of total energy consumption. This was due primarily to increases in the vehicle fleet, and secondarily, to increases in the average miles driven per vehicle and decreases in average fuel consumption efficiency.
- Despite the increase in the number of "small cars" bought by the public after 1965, and a decrease in the number of "standard" cars, the average amount of fuel consumed per mile has continued to increase. This trend can be attributed to the mechanisms used by manufacturers to comply with Federal regulations for auto exhaust emissions. Prior to the 1975 models, these mechanisms resulted in increased fuel consumption per mile in each engine category. This more than offset the declining average engine size in the auto fleet as a whole.

Current Trends in Metropolitan Areas' Use of UMTA Funding

- The vast majority of the Section 5, Formula Grant funds provided under the National Mass Transportation Act (NMTA) of 1974, is being programmed for operating assistance rather than capital grants. This is true despite the fact that a minimum of a 50% local match is required as compared to 20% for capital grants. The trend is due to rapidly increasing operating costs, local commitments to maintain fares and to improve service, as well as the desire of local officials to maximize total Federal grants by obtaining capital grants from the regular discretionary capital grant program.
- In the event of a critical gasoline shortage in the future, metropolitan transit operators may have difficulty absorbing large amounts of "emergency" funding. Generally, metropolitan areas do not have "emergency"

-6-

plans for such eventualities, and without such plans, local operators may be confronted with excessive costs for such factors as overtime wage payments.

- UMTA can respond to substantive short-term increases in Federal transit expenditures if given adequate support for expanded administrative operations.

Policy Initiatives for Increasing Transit Ridership and Achieving Energy Conservation Objectives

- The UMTA Formula Grant program provides an opportunity for the achievement of new short-term national objectives. If UMTA had the authority to vary the Federal share, which now stands at 50%, it could use increases in the Federal share as an incentive for localities to initiate programs to achieve national objectives. These programs could include immediate, non-capital intensive actions for improving the efficiency and effectiveness of urban transportation.
- Pure transit improvement strategies and economic incentives for transit use (including no fare transit) can be very effective in attracting increased patronage, but they are ineffective by themselves in conserving substantial proportions of national energy consumption.
- Total elimination of the transit fare would cause a 60% to 80% increase in transit ridership. This increase in ridership could be accommodated by about a 40% increase in the size of the transit fleet.
- Maintaining peak hour fares at their current levels and totally eliminating off-peak fares would increase total transit ridership by about 40%. This increase in ridership could be accommodated with no significant increase in the size of the transit fleet.
- It is likely that without complementary auto restraints, less than 50% of the riders attracted to transit by fare reductions would otherwise have been automobile drivers.
- Automobile energy conservation strategies of various kinds are much more effective than any transit incentive strategies in reducing oil consumption. In particular, gasoline taxes or other action which would raise the price of gasoline by 50% would

-7-

result in a reduction of about one million barrels per day of gasoline consumption -- more than ten times reduction as would result from a maximum pure-transit strategy for oil conservation. (The maximum pure-transit strategy considered included no-fare transit and a doubling of the transit fleet by 1980.)

- However, in comparison with its impact on energy consumption, the impact of a 50% increase in the price of gasoline on transit ridership is relatively slight, causing a less than 10% increase. This is because the primary response of motorists to gasoline price increases is to purchase more fuel efficient automobiles rather than alter their travel behavior.
- An auto restraint action -- such as a \$1.50/day increase in the price of commuter parking in those areas where auto commuters could most easily shift to transit -- has a far greater effect on transit ridership than does a 50% increase in the price of gasoline.
- In terms of energy saved per new rider attracted, generating additional ridership through auto restraints is more than twice as efficient as generating additional ridership through transit incentives.
- Transit ridership increases generated through auto restraint actions alone would have a negative impact on transit agency finances, since ridership increases would occur primarily in the peak period. As a result, required increases in rolling stock would be proportionally greater than ridership increases generated transit incentive strategies.
- New rolling stock required to handle the increase in peak period ridership associated with auto restraint actions would stand idle or make runs nearly empty in the off-peak period. Auto restraint actions should be combined with incentives to off-peak transit use (such as off-peak fare reductions) to enable more efficient use of the transit fleet.
- A combined strategy incorporating both transit incentives and auto restraints is the most effective strategy to promote energy conservation without lowering the efficiency (measured in passengers per vehicle) of the transit fleet.
- Opportunities exist for financing major transit improvements through revenue generated by auto restraints. For example, no-fare transit service coupled with a doubling of the transit fleet nationally could be financed by the taxes generated from about a 15¢ gas tax increase applied only in metropolitan areas.

- Any major auto use restraint policy will cause substantial hardships, particularly for those low and moderate income households who must use autos for work trips and other necessary travel. This burden can be substantially eliminated by (a) applying the major auto restraints only in metropolitan areas, (b) placing the strongest auto restraints in areas where high quality transit service is available as a substitute, and (c) substantially improving the quality of transit service and the incentives for its use.
- Achieving major increases in the use of transit and energy consumption has long-run implications for national land use and urban growth policy. Existing patterns of metropolitan growth are not conducive to the achievement of these goals, and recent studies by the Council on Environmental Quality indicate that substantial savings in energy consumption could be achieved by fostering less scattered patterns of metropolitan settlement.

Approach to the Study

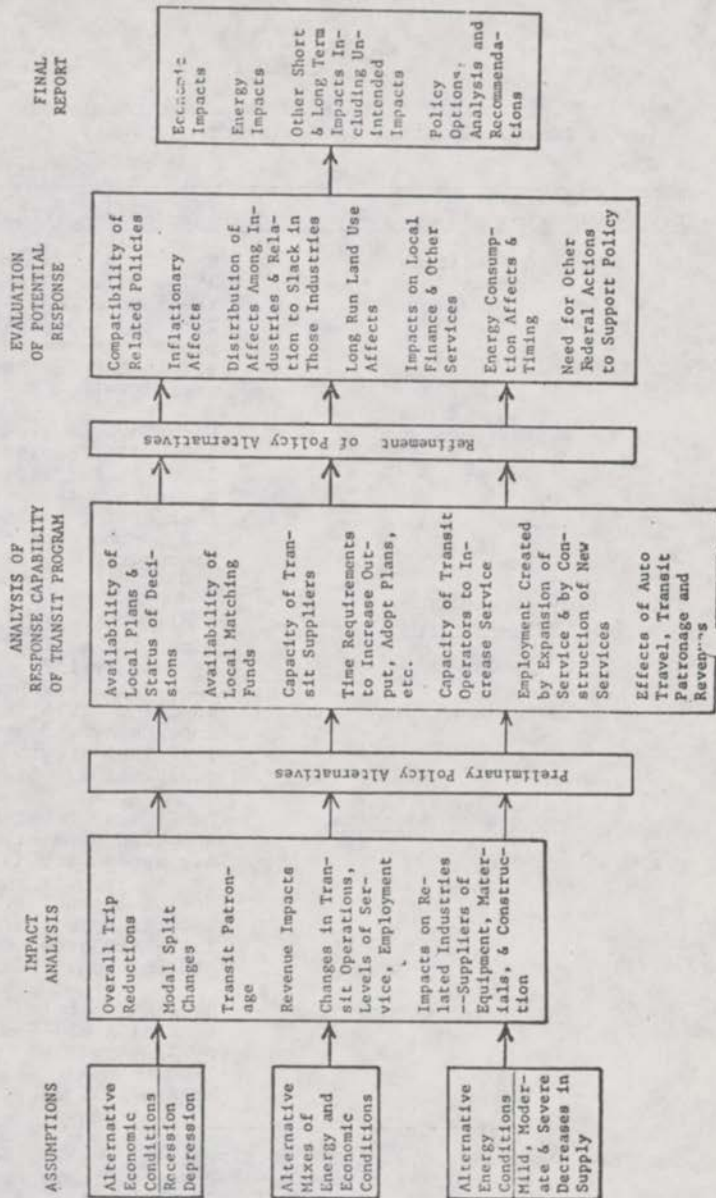
The study approach involved five major steps plus preparation of the final report. These steps are summarized below as a framework for the following sections of the report. (See Figure 1).

The first task was to postulate a range of alternative future conditions for the national economy and the level of national energy supplies. The economic and energy assumptions are shown in Table 1. The economic assumptions were revised during the study to reflect current forecasts, and the assumptions about the reductions in energy consumption range from very short-term reductions, similar to the oil embargo of 1973-74, to a reduction in consumption approximately six times as great as the embargo and nearly equivalent to the current level of all U.S. oil imports.

The second task was a thorough analysis of the impacts that these assumed conditions would have on the transit sector. This involved analyses of effects on urban travel patterns, transit operations and the transit industry.

FIGURE 1

FLOW DIAGRAM - CONCEPTUAL APPROACH TO THE ANALYSIS OF POTENTIAL RESPONSES OF NATIONAL TRANSIT POLICY AND PROGRAM TO ALTERNATIVE FUTURE ECONOMIC AND ENERGY CONDITIONS



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TABLE 1

ALTERNATIVE ENERGY AND ECONOMIC CONDITIONS
SELECTED FOR ANALYSIS OF IMPACT ON TRANSIT INDUSTRY

Type of Alternative Assumption	Assumed Conditions
I. Economic Conditions:	
A. Recession	Unemployment averaging 8% for 1975, 7% in 1976 and 6% for the rest of the 5 year period. Duration = 36 months peak to peak of the business cycle (24 months decline, 12 month recovery)
B. Depression	Unemployment averaging 9% for 1975, 11% for 1976, 9% for 1977, 6% for 1978 through 1980. Duration = 48 months peak to peak of the business cycle (30 months decline, 18 month recovery)
II. Energy Conditions:	
A. <u>Decrease - Mild</u>	Decline in total oil consumption of 1 million bbls/day by January 1976 Some cuts in imports (cuts of 10-20% of 1975 level of imports by January 1976) 1977-1980 growth in oil consumption: 3%/year
B. <u>Decrease - Moderate</u>	Decline in total oil consumption of 3 million bbls/day by January 1977 Cut in imports equal to 60-70% of the 1975 level of imports by January 1977 1978-1980 growth in oil consumption: 1.5%/year
C. <u>Decrease - Severe</u>	Decline in total oil consumption of 6 million bbls/day by January 1980 Imports cut equal to 100% of the 1975 level.

SOURCE: Based on S.O.M./SyDec Work Program prepared for OTA on December 9, 1974, but revised for February Progress Report to reflect deepening recession and more pessimistic forecasts generally being made by others, and further revised to reflect changing conditions and final needs of the study in April and May.

In carrying out the impact analysis a wide variety of sources were used. A general analysis was made of the economic and energy studies recently issued by the Ford Foundation, the Federal Energy Administration, and the U.S. Department of Transportation.

With regard to urban travel patterns and transit operations, the consultants analyzed data on the effects that previous recessions and the recent oil embargo had had on total urban travel, type of travel, choice of mode, and transit usage, revenue, and operations. This analysis was strengthened by a statistical analysis of monthly and quarterly time-series data on national transit ridership in relation to other economic and transportation trends.

In the assessment of the role of the transit industry two types of analyses were undertaken. The first was an input-output analysis to determine the effects that changes in the level of transit investment and operations would have on the level of employment in that sector and related industries. The second was an analysis of the production capacity of major suppliers of transit equipment. These interviews with top management provided insight into the problems confronting the industry and its ability to accelerate production in response to changes in national policy.

The third major step in the study was to analyze the abilities of the Urban Mass Transportation Administration and local metropolitan transit operators to respond to changes in the transit program. A review was made of the current management of the Urban Mass Transportation Administration program from the standpoint of its capacity to administer new responsibilities under the National Mass Transportation Act of 1974 and to increase the scale of the various components of the program.

Metropolitan transportation planning, financing, and implementation capabilities were evaluated in depth as part of the Assessment of Community Planning for Mass Transit. This provided a basic picture of the response capability at the metropolitan level. In addition, a survey was done of the use to which metropolitan areas planned to put the new NMTA formula-grant funds -- capital vs. operating. Metropolitan experience was also surveyed in terms of the local effects of the recent energy crisis, the recession, and potential capacity of local areas to expand transit operations and/or rates of investment in new equipment and facilities as part of an expanded national program.

The fourth major step involved developing and refining public policy alternatives. This process involved a number of iterations that began in the preliminary stages of the study (as shown in Figure 1).

The range of policy options covered initiatives to increase the use of mass transit as well as to achieve energy conservation objectives. More specifically, these alternatives included service improvements, capital investments in new systems and expansion of existing systems, economic incentives such as fare reductions, fare elimination, or indirect tax incentives, and various automobile pricing and regulatory restrictions designed to encourage shifts from auto to transit. Consideration was also given to long-term policies for land use and urban growth.

The fifth major phase of the study was to evaluate these policy initiatives. This evaluation considered the experiences of communities throughout the country which had implemented similar policies and programs. It involved a preliminary comparative assessment of the effectiveness of alternative actions or combinations of actions, and an evaluation of the means for implementing these actions. The results of this evaluation provided the basis for comparing the potential advantages and disadvantages of alternative policies.

The final report on Energy, the Economy, and Mass Transit was prepared after the analysis was complete. It is summarized in the following pages.

THE RELATIONSHIP BETWEEN TRANSIT AND THE ECONOMY

The transit industry and the economy interact in two different ways. First, economic conditions, such as increasing affluence or high unemployment, have had noticeable impacts on transit ridership. Second, transit, through purchases of goods and services, can influence economic conditions in general and the construction and motor vehicle industries in particular. These are two of the most depressed sectors of the economy. These relationships have been investigated and the results and conclusions are summarized in this section.

The Decline of Transit and Its Causes

By the middle of the 1920's the automobile had begun to assert itself as a major form of urban transportation. With prosperity and mass production, automobile ownership and use expanded quickly. A pattern of serious competition between the private automobile and public forms of transportation in urban areas emerged, and transit ridership began to decline.

Table 2 shows the general decline in transit patronage from 1926 to 1972 except for the World War II interlude. From 1960 to 1972, revenue passengers declined at a compound annual rate of 2.9%.

In the three decades since World War II, there has been a continuous financial decline in the urban public transit industry in the United States paralleling the decline in ridership. Even though fares have risen at a faster pace than the consumer price index since 1965, passenger revenues have not grown rapidly enough to offset increased costs. More and more systems have experienced operating deficits and many privately owned systems have either ceased to operate or have sold their depleted operations to the municipalities they served.

The financial difficulties of transit systems and the emergence of urban public transportation as a major issue can be attributed to a number of interdependent causes:

- The urban population has grown primarily outside of the central cities where public transportation systems were located. From 1960 to 1970, suburban population increased by 34 percent while central city population increased only 1.5 percent. Most

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TABLE 2

TRANSIT TRENDS
1926 - 1974

Year	Revenue Passengers			Vehicle Miles			Number of Passengers Per Vehicle Mile	
	Rapid	Street	Total	Rapid	Street	Total	Rapid	Street
	Transit	Transit		Transit	Transit		Transit	Transit
	(millions)			(millions)				
1926	--	--	17,234	--	--	2,670	6.5 (avg.)	
1930	--	--	15,567	--	--	2,707	5.8 (avg.)	
1935	2,252	7,497	9,782	439	1,799	2,327	4.4	4.2
1940	2,282	8,222	10,504	471	2,125	2,596	4.8	3.7
1945	2,555	16,393	18,982	458	2,721	3,254	5.6	6.0
1950	2,113	11,699	13,845	443	2,489	3,008	4.8	4.7
1960	1,670	5,516	7,521	391	1,677	2,143	4.3	3.3
1970	1,574	4,186	5,932	407	1,442	1,883	3.9	2.9
1972	1,445	3,808	5,253	386	1,370	1,756	3.7	2.8
1973	1,424	3,870	5,294	407	1,428	1,835	3.5	2.7
1974P	1,435	4,171	5,606	436	1,452	1,888	3.3	2.9

P = Preliminary

Source: American Transit Association, '74-'75 Transit Fact Book,
Washington, D.C.

of the older central cities with higher densities and major transit systems suffered population decreases during the decade.

- Suburban living in the United States is largely automobile oriented. Population densities are low and parking space is usually free. Because of the wide dispersion of origins and destinations, transit cannot operate profitably and is often not even available.
- Automobile ownership has increased dramatically. Between 1960 and 1970 it increased from 1.09 to 1.27 autos per household. Only 20% of all households were without automobiles by 1970 and therefore transit dependent. Disproportionately such households contain the poor, the old, the young and the handicapped.
- Extensive freeway and other highway construction has improved the level of traffic service and increased the diversion from public transportation systems to the use of private automobiles.
- In the face of the financial squeeze, transit management did not have the resources to increase or improve service nor to market what services they did have. In addition, management of a declining publicly-owned or publicly regulated enterprise is particularly difficult when much of the public still perceives it as a break-even enterprise.
- Federal programs to assist different urban transport modes have been enacted and administered separately and inconsistently. Highway funding has encouraged the use and ownership of automobiles, while public transportation has had low priority.
- Federal funds for comprehensive urban planning and development available from the Department of Housing and Urban Development have been only partly coordinated with transportation programs and their implementation within metropolitan areas.

TABLE 3

AUTOMOBILE OWNERSHIP IN THE U.S.
1960 and 1970

	1960	1970
Automobiles in Use		
Per Capita	0.32	0.39
Per Household	1.09	1.27
Percent of Households Owning Automobiles	75.5	79.2
One Automobile Only	62.1	50.3
Two or More Automobiles	13.4	29.3
Percent of Household with no Automobiles	24.5	20.4

Source: Automobile Manufacturers Association, Inc.,
Automobile Facts and Figures, 1968 and 1971.
Data estimated by the Association from Census
Information.

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- During most of the period in which transit's problems increased, state and Federal governments were largely concerned with the problems of transportation between urban areas. The urban portion of the interstate highway program was a by-product and was not created to solve urban transportation problems.

Recent Upturn in Transit Use

The long downward trend in transit ridership reversed in late 1973 and 1974. The last three months of 1973 each showed increases over the same months of the previous year. This resulted in an increase for the year -- the first time this has occurred in more than 20 years. In 1974 transit ridership increased by 5.9% above 1973.

Although energy conditions appear to have been the major cause for the increases in transit ridership in 1973-74, economic factors also contributed to the reversal of the historic trend. One condition that set the stage for the reversal is that by 1973 transit ridership had declined about as far as it could. Few "non-captive" riders used transit, and most of the riders who could choose between using transit or automobiles for their trips had already shifted away from transit. Another economic reason has to do with the stabilization and reduction of fares. During 1968-1974 public takeovers of transit systems tended to stabilize fares, and during the past three years of that period, a number of large cities reduced fares. Both of these actions resulted in increased ridership. Finally, the public takeovers also have often led to improved service which also has helped to attract additional riders to transit.

While no direct evidence is available, the increase in UMTA funds for capital improvements and for transportation planning probably sparked the interest of many local governments to "do something" about transit.

Effects of Recession and Depression on Transit Ridership

Several analyses of changes in transit ridership as a function of changes in economic conditions (expressed as the unemployment rate) have revealed a relationship between the two. However, this relationship indicates that only a very small change in transit ridership results from rather large changes

in the unemployment rate. The significance of these economically induced changes in ridership is far overshadowed by the changes in ridership induced by changing energy conditions.

Three different analyses were conducted to determine the effect on ridership of large increases in the level of unemployment. The three analyses yielded surprisingly similar results. An increase of 2.5% in the unemployment rate (i.e., from 5% to 7.5% unemployed) is accompanied by a decline in transit ridership of 2% or less.

In the first analysis, it was assumed that newly unemployed individuals would reduce their work trips to zero, and thus the proportion of those work trips formerly made on transit would be eliminated. The elimination of these transit work trips on transit results in a decline in national transit ridership of between 1.2 and 2.0%.

The second analysis examined the income elasticity of transit expenditures. This analysis indicated that, on a national level, a decline in personal income of about 2% during a recession (which is roughly equal to a 2.5% increase in unemployment) will result in a decrease in transit expenditures of about 1%. Assuming no change in fares, this will result in a decrease in transit ridership of about 1%.

The third analysis calculated the relationship between the change in national transit ridership and the change in the national unemployment rate (and other factors) using regression analysis techniques. The annual change in national transit ridership was the factor to be predicted. Among the variables considered which could influence transit ridership were change in average fare, several measures of changes in economic conditions (including gross national product, personal consumption expenditures, number of unemployed, and unemployment rate), and several measures of changes in transportation energy consumption (including vehicle miles traveled, urban vehicle miles traveled, and highway fuel consumed).

The analysis revealed that the factor statistically most significant for changes in transit ridership was the change in average fare with change in the national unemployment rate next in importance.

Using the equation derived from the analysis, and holding the average fare constant, the decrease in national transit ridership resulting from a 2.5% increase in the unemployment rate is predicted to be about 2%.

Multiplier Effect of Transit Investment

The vast majority of government expenditures for transit have either gone for subsidizing transit operations or transit capital improvements in the form of new buses, new rail cars or rapid transit construction. This section summarizes the employment impact resulting from increases in expenditures for transit operations, bus manufacturing, rail car manufacturing, and rapid transit construction. The analysis was accomplished by estimating the employment, including the multiplier effect, generated in each of these four industries, that results from the addition of 1 million dollars of production.

The analysis relied heavily upon the data included in the Input/Output Structure of the U.S. Economy^{1/} which includes all of the purchases and sales of each of 367 industrial categories. Based upon purchases recorded in the Input/Output table, the transit, bus manufacturing, rail car manufacturing, and rapid rail construction industries were analyzed. The analysis estimated the employment generated by production in each of these industries, the employment attributable to purchases by these four industries from their direct supplying industries, and the employment generated indirectly by the purchases of the supplying industries and other expenditures such as wages and salaries which were attributable to each of these four industries.

The analysis revealed that the increase in employment attributable to 1 million dollars in production in 1974 in each of these four industries was approximately the same - about 80 workers in the four industries themselves and their direct and indirect supplying industries. The estimated employment generated per \$1 million of production in each of the four industries is indicated below:

Public Transit	83.2 Employees Per Million Dollars of Production
Bus Manufacturing	82.9 Employees Per Million Dollars of Production

^{1/} U.S. Dept. of Commerce, Bureau of Economic Analysis, Input/Output Structure of the U.S. Economy: 1967, three volumes, U.S. Government Printing Office, Washington D.C., 1974.

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Rapid Rail Vehicles	79.9	Employees Per Million Dollars of Production
Rapid Transit Construction	79.4	Employees Per Million Dollars of Production

These employment figures closely approximate the figures developed by Bezdek and Hannon^{1/} using 1963 input/output data. Bezdek and Hannon concluded that mass transit construction generated 3.2% more employment than highway construction.

Although the total number of jobs created per million dollars of production in each of these four industries is approximately the same, there is a great difference in the portion of jobs generated in the main industries themselves, and their supplying industries. The public transit industry, which spends the greatest share of its purchases on labor, generates well over half of its employment in the transit industry itself (55.8 jobs) while its direct and indirect suppliers account for only 27.4 jobs per million dollars invested in increased transit output. The other industries generate less than one quarter of their employment in the main industry, with the bulk of their employment generated indirectly, as shown in Table 4.

Labor intensive industries such as construction and public transit are likely to create employment opportunities in the localities where the money is spent, while the capital intensive industries, such as bus and rail vehicle manufacturing are likely to distribute employment generated throughout the whole country. Thus, the expansion of transit operations or subway construction in a particular city is likely to have significant employment effects in that city and little effect elsewhere. However, the purchase of buses by that same city will have little employment impact in the local area (unless the area is oriented toward the bus manufacturing industry), but will distribute the employment effect across the country as a whole. Thus, the expenditure of government money for rapid transit construction or for increased transit operations will go a long way toward improving the employment conditions in a local area, while, the expenditure of government money for buses or rail cars is likely to have a greater effect on the employment situation of the country as a whole.

^{1/} Roger Bezdek and Bruce Hannon, "Energy, Manpower, and the Highway Trust Fund," Science, August 23, 1974, pp. 669-675.

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TABLE 4

MAIN INDUSTRY, DIRECT, INDIRECT AND
EMPLOYMENT GENERATED
(Based on 1967 U.S. Input/Output Table)

<u>INDUSTRY</u>	<u>EMPLOYMENT GENERATED</u>		
	<u>MAIN INDUSTRY</u> ^{1/}	<u>DIRECT</u> ^{2/}	<u>INDIRECT</u> ^{3/}
	(Estimated employment per \$1 million of output in main industry in 1974)		
o Public Transit	55.8	8.3	19.1
o Bus Manufacturers	13.0	16.1	53.8
o Rail Car Manufacturers	20.6	15.2	43.5
o Rapid Transit Construction	12.5	16.0	51.4

-
- 1/ The Main Industry in the industry itself, i.e. public transit, bus manufacturers, rail car manufacturers, and rapid transit construction.
- 2/ Direct refers to the employment which can be attributed to the production of goods and services directly purchased by the main industry.
- 3/ Indirect refers to the employment which can be attributed indirectly to the main industry from such things as: the expenditure of wages and salaries, and the purchases of direct suppliers, etc.
-

The Capacity to Expand the Transit Industries

From the analysis it has been concluded that the transit industry and its major capital suppliers (bus and rail car manufacturers and the rapid transit construction industry) could significantly increase their operation and production in a very short period of time, if additional money were to become available.

An examination of the non-capital purchases of the transit industry from the Input/Output data revealed that the transit industry purchased less than 1% of the production of any of its supplier industries. Even a very large increase in purchases of non-capital goods and services resulting from a large increase in transit operations would not strain the capacity of the supplying industries.

Well over half of the non-capital purchases of the transit industry are for labor. Discussion with transit operators reveals that new drivers and mechanics could be trained and ready for increased revenue operations well before the required additional rolling stock could be delivered.

With regard to capital purchases, in 1974 transit bus manufacturers delivered more than 4,800 units which was more than 3 times their deliveries in 1970. If certain component parts become increasingly available and if the long term market for transit rolling stock were to increase, the bus and rail car manufacturers could increase their production substantially to meet this new demand. Basic capacity, as reported in detail by the primary transit bus manufacturers, would permit a production rate of 7,500 units per year during 1975/76 and a rate of 10,000 units per year by 1976/77 -- assuming the availability of the component parts.

Excess capacity also exists in the rail car manufacturing industry, as evidenced by the plan of Rohr Industries to close down its Chula Vista, California transit car production line in June or July of 1975, with the completion of production for the San Francisco area BART System.

Aside from the lack of a market for additional transit buses, several other factors influence the bus manufacturing capacity:

- Availability of critical component parts. About ten component parts are produced by single-source suppliers; their production would have to be increased in order to permit significant increases in bus production. Increases in the capacity for producing these critical components can be achieved by obtaining additional tooling or adding shifts by the existing manufacturers, or by finding alternate suppliers for some components.

- Effects of bus specifications. There are nearly 1,600 options available for transit buses, not including the almost unlimited number of interior and finish options. Standardization of transit bus specifications would greatly assist in the manufacturing of transit buses by allowing the production of standard transit vehicles in advance of orders. The standardization of transit buses would also significantly decrease the cost of buses (roughly \$60,000) by as much as \$10,000 to \$15,000 per unit.
- Even flow of capital grant funds. In the past, UMTA has not approved the majority of capital grant applications until the second half of the fiscal year, resulting in bunching up of bus orders during this period. A more even distribution of capital grant approvals and resulting bus orders would help increase the capacity of bus manufacturers.
- Effects of capital vs. operating funds. The desire of major transit operators to use their Section Five funds for transit operations, rather than capital equipment, may result in a decrease in the number of new buses ordered.

The level of rapid transit construction could be significantly increased because most of the skills and equipment required for rapid transit construction are available in other construction industries such as highway construction and foundation excavation. By drawing upon the resources of these other construction industries, the pace of transit construction could be significantly increased. The only type of rapid transit construction whose capacity might be strained if construction levels were significantly increased is tunnelling, which requires specialized equipment and manpower skills. However, if the tunnelling portions of rapid transit system construction were scheduled over a period of time, rather than being scheduled to occur in several cities at the same time, the tunnelling construction capacity would not be strained.

RELATIONSHIP BETWEEN TRANSIT AND ENERGY

This section begins with a brief description of how *de facto* public policies in the past have encouraged inefficiencies in the use of fuel in urban transportation. Next, transit's present role is defined in relation to the overall national energy picture, first by examining the proportion of energy consumed by transit and then by comparing the opportunities for energy conservation in the transit field in relation to other modes of transportation. These discussions will show that transit's basic potential in energy conservation lies in providing a substitute for auto travel in urban areas. The final section discusses the travel pattern changes which accompanied the oil embargo.

The Role of Cheap Gasoline in Urban Transportation

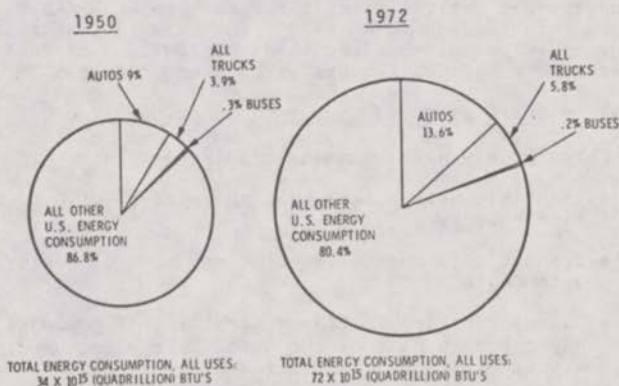
There is general agreement that the U.S. followed a "cheap energy" policy in the Post World War II period along with a "cheap auto transportation" policy. The real cost for both autos and fuel declined in the 1950-1970 period. (That is, the rate of increase in these prices was less than the rate of increase in personal income after removal of inflation factors). The tax load imposed through these channels was also very low by world standards. There was no public policy favoring conservation of any of the related resources. The combination of declining real cost and increasing real incomes produced a long run trend of increase of about 5.5% per annum for motor fuel consumed in urbanized areas.^{1/}

During this period, auto transportation increased its share of total energy consumption (Figure 2). This increased share was due primarily to increases in the vehicle fleet (see Figure 3), and secondarily to increases in the average miles driven per vehicle and decreases in average fuel consumption efficiency.

The continued increase in average fuel consumed per mile of auto travel is particularly interesting because there was a continuing decline in the number of large ("standard") cars and an increase in the number of small cars bought by the public after 1965. This would have decreased average fuel consumption except for the effect of Federal regulation of auto exhaust emissions which began in 1966. Prior to the 1975 model year the means chosen by the manufacturers to meet the required Federal standards resulted in sharply increased fuel consumption per mile in each engine size category. This more than offset the declining average engine size in the fleet as a whole.

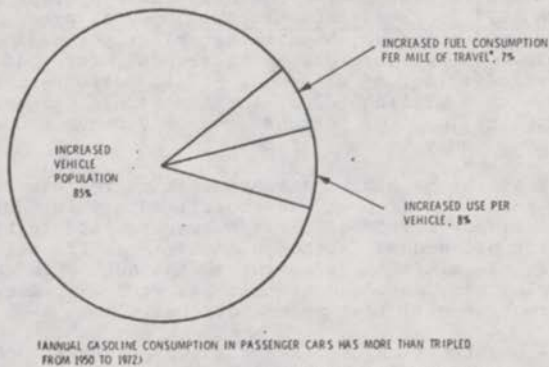
^{1/} Calculated from Highway Statistics, Federal Highway Administration, Washington, D.C.

FIGURE 2

SHARE OF U.S. ENERGY CONSUMED BY
MOTOR VEHICLES IN 1950 AND 1972

Sources: (1) U.S. Bureau of Mines, *Minerals Yearbook*
(2) FHWA Highway Statistics, 1972

FIGURE 3

FACTORS CONTRIBUTING TO INCREASED PASSENGER CAR
FUEL CONSUMPTION BETWEEN 1950 AND 1972

SOURCE: FHWA ANNUAL HIGHWAY STATISTICS

The most important effect on transit of the de facto public policies has been to reduce transit ridership by encouraging the widespread use of cars, and to make transit fares appear relatively high. One of the effects of the continuing decline in transit ridership has been a parallel decline in the average number of passengers per vehicle mile (refer back to Figure 2 on page 24). This in turn has caused a steady increase in transit's rate of energy consumption, measured in either gallons of fuel per passenger mile or kilowatt hours per passenger mile.

Transit's Share of Total Energy Consumption

Three points will be made in this section:

- Transit consumes less than one percent of U.S. transportation energy
- Transit is a much more efficient user of energy than the automobile
- Energy consumed in the construction of rapid rail systems may approach half of the total energy consumed by a system over a 50 year period of operation.

Figure 4 shows that mass transit and intercity buses together consume only one percent of the U.S. transportation energy, while automobiles in urban areas consume 34.2%. A more detailed study by Pollard, Hiatt and Koplow^{1/} estimated that bus and rail urban transportation consumed only 0.66% of the total transportation energy, or 1.8% of all urban passenger transportation fuel.

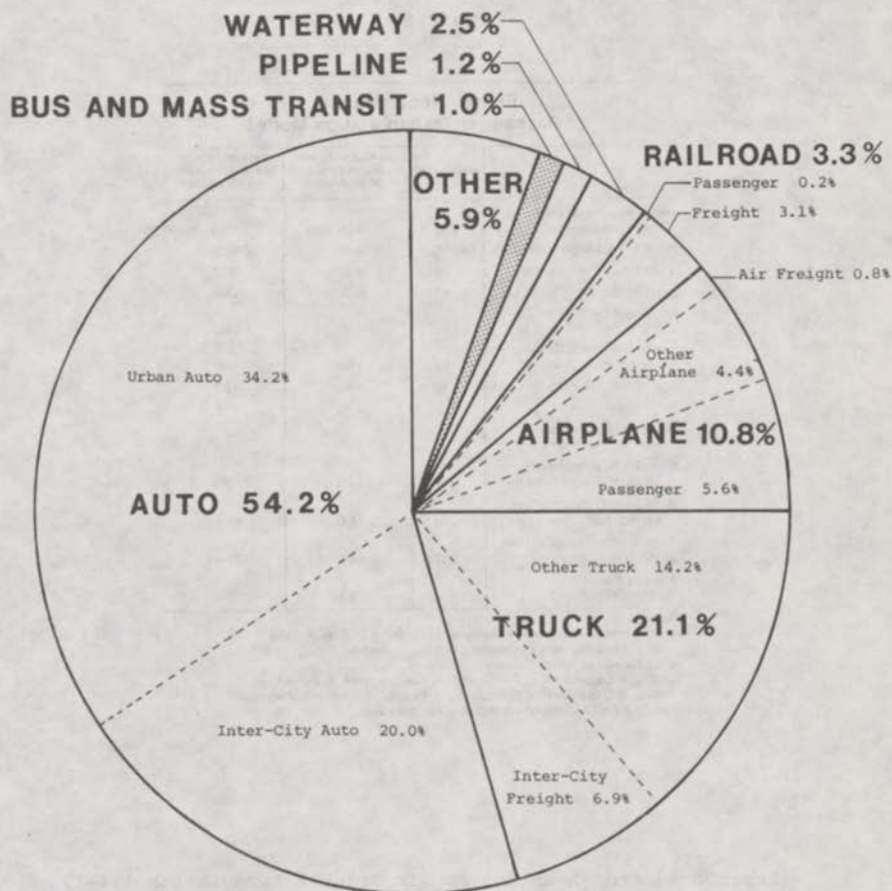
Transit's importance in providing urban transportation is much more important than its low energy consumption implies because transit makes more efficient use of energy. Table 5 (reproduced from the APTA 1974-75 Transit Fact Book) shows an array of urban transportation modes for which passenger-miles per gallon figures are available. The private car at usual peak hour loading is by far the least efficient of all modes. This reflects the price Americans have been willing to pay for individual personal transport with its high level of personal comfort, convenience and reliability, eroded only by congestion.

All of the main urban transportation vehicles are represented at both peak and off-peak passenger loadings in Table 5. The energy efficiency effect of varying average load factors is apparent for all modes. Although an off-peak transit bus with 30 people is six times as efficient as the auto with an average of 1.4 people, the peak load transit bus with 75 riders is almost three times as efficient as the off-peak bus.

The construction of fixed guideway systems such as BART consume a great deal of energy. Table 6 indicates that on a 50-year

^{1/} Opportunities to Conserve Transportation Energy, Transportation Systems Center, U.S. Department of Transportation, 1974.

Figure 4
Energy Consumption by Transport Mode, 1970



SOURCE: Lutin, J.M., *Comparison of Energy Savings for Work Trips*, Princeton University Transportation Program, 1974.

TABLE 5

**Energy Requirements
of Passenger Transportation Modes**

	PASSENGERS	VEHICLE MILES PER GALLON OF FUEL OR EQUIVALENT	PASSENGER MILES PER GALLON OF FUEL OR EQUIVALENT
Heavy Rail Transit (Subway) Car, Peak Load (a)	135	4.00	540
Intercity Passenger Train (b)	540-720	0.50	270-360
Transit Bus, Peak Load (c)	75	4.10	307
Intercity Bus (d)	47	6.00	282
Commuter Rail Car, Diesel Powered (a)	125	2.00	250
Heavy Rail Transit (Subway) Car, Off-Peak Load (a)	35	4.00	140
Transit Bus, Off-Peak Load (c)	30	4.10	123
Rail Turbine Train (b)	320	0.33	110
Standard Size Automobile, Intercity, Maximum Load (e)	6	18.00	108
Standard Size Automobile, Urban, Maximum Load (e)	6	14.40	86
Wide-Body Commercial Jet Aircraft, 1,000 Mile Flight (f)	256-385	0.14-0.22	54-60
Twin Jet Commercial Aircraft, 500 Mile Flight (f)	68-106	0.44-0.54	37-47
Average Commuter Automobile (a)	14	13.5	19

Sources

- (a) Commonwealth of Pennsylvania, Department of Transportation
- (b) National Railroad Passenger Corporation (Amtrak)
- (c) Cleveland Transit System
- (d) U.S. Department of Transportation, Transportation Systems Center
- (e) U.S. Department of Transportation, Federal Highway Administration
- (f) National Aeronautics and Space Administration

(Reproduced from American Public Transit Association '74-'75
TRANSIT FACT BOOK)

Table 6
Total BART Energy Requirements For All Purposes
During 50-year Life Span

<u>Major Purpose</u>	<u>Energy Used</u>	<u>Per Cent</u>
Construction Energy:	1.1×10^{14} BTU	44%
Traction Energy:	1.0×10^{14} BTU	40%
Station Operation and Maintenance Energy	0.4×10^{14} BTU	16%
Total Energy Required:	2.5×10^{14} BTU	100%

SOURCE: Healy and Dick; Total Energy Requirements of the BART System,
Santa Clara University, July 1, 1974

basis, 44% of BART's total energy requirement was expended during construction. Since this system represents the most expensive type of construction including a long underwater tunnel, this may be considered an upper bound on the range of such requirements.

A study by Eric Hirst of the Oak Ridge National Laboratory includes an analysis of total automobile energy consumption similar to the analysis of BART's construction and other energy consumption. The Hirst study showed the energy consumption in automobile vehicle manufacturing, repair, sales and financing, as well as the energy consumed in refining the gasoline. These functions reduce the average miles per gallon from about 14 to 7.

It seems unquestionable that in determining national transportation policies the complete array of energy consumption requirements should be taken into account.

Some Alternative Courses for Energy Conservation in Transportation

The principal message from the above review is that conservation efforts must focus on the consumer of 98% of urban passenger transportation fuel -- the automobile. Shifting travel to transit will have beneficial energy saving effects, but as will be shown in a later section the most effective ways of accomplishing this shift, from an energy conservation standpoint, involve emphasis on disincentives to auto use, coupled with transit use incentives.

The need to concentrate on auto efficiency has been noted by both the Department of Transportation^{1/} and the Federal Energy Administration (FEA).^{2/}

The FEA paper reported estimates of energy savings in 1980 for three transportation policies as shown in Table 7. It clearly shows that changes in auto travel have much more energy saving potential than transit improvements.

The Department of Transportation study is summarized in Table 8 in terms of the potential fuel savings of a wide variety of options considered, including vehicle design changes, car pooling ("load factors"), traffic operations improvements, as well as wide range of shifts among modes. Note that the shift from urban auto to bus is given the greatest potential for fuel savings of all mode shifts by either 1980 or 1990, but much less potential than car pooling and an order of magnitude less effective than many vehicle design measures.

^{1/} Summary of Opportunities to Conserve Transportation Energy, Pollard, Hiatt and Koplow, Transportation Systems Center, a Report for the Office of the Secretary of Transportation, Final Draft, January 1975.

^{2/} Stuntz, Mayo S. Jr., Mass Transit and Energy Conservation, Federal Energy Administration, March 5, 1975.

TABLE 7

Energy Conservation Potential of Various
Transportation Policy Actions

<u>Policy</u>	<u>Estimated Energy Savings (1980)</u>
1. Double mass transit system size and ridership	40-50,000 barrels/day ^{1/}
2. Increase car occupancy to 2.0 PM/VM	350,000 barrels/day
3. 40% increase in new car fuel economy	640,000 barrels/day

SOURCE: Mayo S. Stuntz, Jr. Mass Transit and Energy Conservation, FEA, March 5, 1975.

^{1/} The American Public Transit Association (APTA) vehemently disputes this figure. In an undated paper entitled Energy Conservation and Public Transit: An Interim Rebuttal by the American Public Transit Association, APTA implies that the savings should be at least 178,000 bbl/day and that much greater savings could be achieved if transit's efficiencies could be fully utilized.

The primary source of the disparity between the FEA and APTA estimates is that they make considerably different assumptions about the reduction in automobile vehicle miles of travel which would be associated with a doubling of transit ridership.

In actuality, the amount of energy saved will depend upon how transit ridership increases are achieved. As discussed later in this document, the mere doubling of the national transit system's size, in and of itself, would not cause a doubling of ridership -- it would result in an estimated 20% to 40% increase in ridership. In order to achieve a doubling of ridership it would be necessary to take substantial actions to restrain auto use and/or to create substantial transit incentives in addition to the doubling of the transit system's size. Doubling transit ridership by auto restraint actions generate energy savings of not much more than 100,000 barrels/day through the diversion of auto drivers to transit. With most auto restraint actions, however, there would be substantial additional energy savings over and above the shift to transit because of more efficient use of autos and reduction in travel. On the other hand, doubling transit ridership by transit incentive actions alone, such as the elimination of fares, would be likely to produce energy savings of only about 60,000 barrels/day or less.

Table 8: Summary of Effects of Various Options on Fuel Savings
From Department of Transportation Program

OPTION	FUEL SAVINGS AS % OF TOTAL DIRECT TRANSPORT FUEL	
	1980	1990
DOMESTIC PASSENGER HIGHWAY		
Auto: Vehicular Efficiency		
Improvements		
1) Market Response:		
(a) 85c current	2.7	7.0
(b) 65c real	9.8	11.8
2) Small Cars (19 mpg)	9.4	13.9
3) Lean Burn Engines	3.8	8.3
4) Stratified Charge Engines	4.0	13.3
5) Diesel Engines	3.0	12.4
6) Cont. Vars. Transmissions	3.3	13.0
7) Intermediate w/Tech. Options	3.0	14.7
8) Small w/Tech. Options	9.4	21.4
9) Battery Electric	7	7
10) Retrofits (radials only)	0.7	0
Load Factor (49% participation in carpools)	2.3	2.1
Operational Improvements		
1) Speedlimits (55 m.p.h.)	1.4	1.2
2) Maintenance	0.7	0.4
3) Driving Habits	2.4	2.1
4) Traffic Flow	0.5	0.9
Demand Reduction	2	3
URBAN AUTO SHIFTS		
Urban Auto to Bus	0.8	1.3
Urban Auto to Rail	No Potential	
Urban Auto to Bicycle	0.5	0.9
IC AUTO SHIFTS		
Intercity Auto to Bus	0.3	0.7
Intercity Auto to Rail	0	0
AIR PAX SHIFTS		
Air Passenger to Auto	0.2	0.3
Air Passenger to Rail	0.1	0.2
Air Passenger to Bus	0.1	0.4
AIR FREIGHT SHIFTS		
Air Freight to Truck	0	0
IC TRUCK SHIFTS		
Intercity Truck Freight to Rail	0.1	0.5

SOURCE: Pollard, Hiatt and Koplou, Summary of Opportunities to Conserve Transportation Energy, Transportation Systems Center, A Report for the Office of the Secretary, Final Draft, January 1975.

What is not often recognized or emphasized in many discussions is the complementarity of programs aimed at discouraging auto use in urban areas and programs to encourage transit use. From both the public policy and political standpoints, it would be desirable for major transit incentives to be implemented first, while being clearly linked to a later auto restraint program. Insofar as possible, all non-frivolous demands for transportation movement should be met. That is, there should be an approximate balance between the number of trips which are reduced by urban auto travel through any auto restraint measures and the number of trips which are attracted to transit by incentives such as service improvements and fare reductions.

Travel Pattern Changes During and After the Embargo

The era of cheap plentiful gasoline ended with the fuel embargo beginning in late 1973.

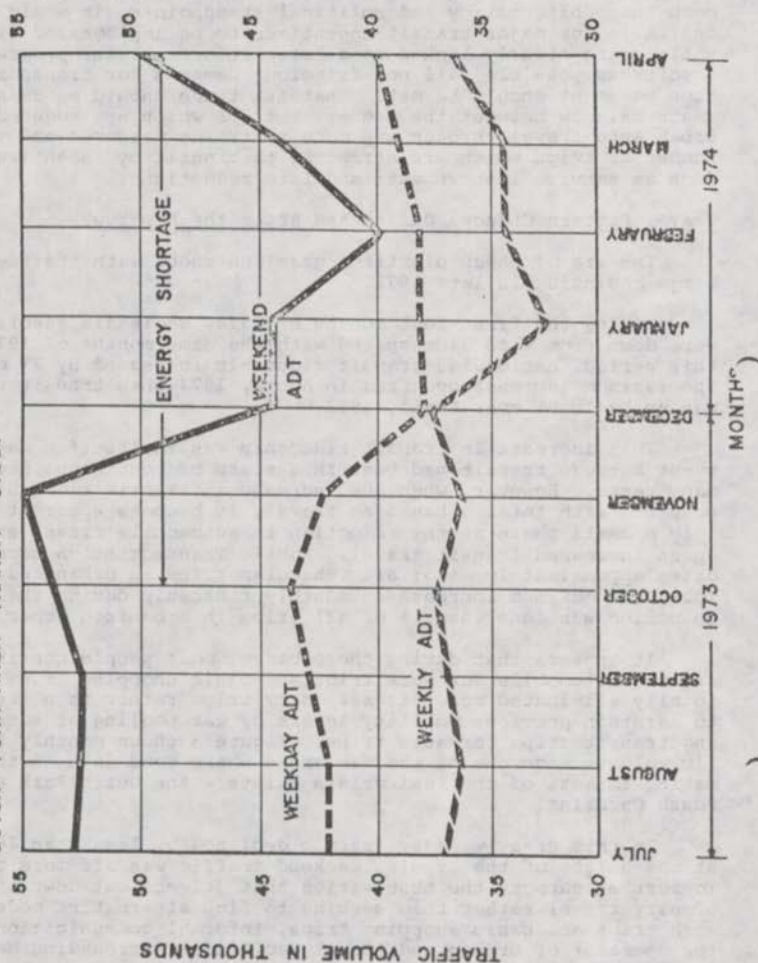
During the first four months of 1974, wholesale gasoline sales were down from 4 to 9% compared with the same months of 1973. During this period, nationwide transit ridership increased by 7% over 1973. The maximum increase occurred in April, 1974 when transit ridership was up by 10.5% over April, 1973.

This increase in transit ridership was in itself a major event because transit had been in a state of continuous decline for many years. However, when the increase in transit ridership is compared with total urban area travel, it becomes apparent that only a small share of the reduction in automobile travel showed up as increased transit travel. Public Transportation accommodates approximately 8% of all vehicular trips in urbanized areas. Thus, the maximum increase in monthly ridership during the embargo period was less than 1% of all trips in urbanized areas.

It appears that during the embargo, most people continued to use the automobile for work trips and basic shopping trips and totally eliminated more discretionary trips rather than seeking to maintain previous mobility levels by car pooling or substituting transit trips for auto trips. Figure 5 shows monthly traffic volumes from one of the few areas where good data on the trip-making impacts of the fuel crisis exists - the Dutch Fork area in South Carolina.

In this area, weekday traffic declined by less than 15% while at the height of the crisis, weekend traffic was off more than 25%. To further support the observation that drivers cut down on discretionary travel rather than seeking to find alternative modes for work trips and basic shopping trips, informal communication with the operator of bridge and tunnel facilities surrounding Manhattan indicate that evening and weekend traffic was cut very sharply during the embargo period while weekday auto commuting was hardly affected.

FIGURE 5
MONTHLY CHANGE IN TRAFFIC VOLUME FOR TOTAL
WEEK, WEEKDAY AND WEEKEND ADT, ON I-126
DUTCH FORK AREA TRANSIT STUDY



It is of interest to note that transit systems appear to be retaining nearly all of the ridership increases from the embargo period. According to the American Public Transit Association, transit ridership in the first four months of 1975 was down less than one half of 1% from the first four months of 1974. This is apparently due to the combination of several factors:

- the growth in the transit fare has been considerably less than the rate of inflation, implying a fare reduction in real terms;
- the quantity and quality of transit is increasing nationwide -- new passenger equipment deliveries in 1974 were up more than 40% over deliveries in any year since 1951; and
- gasoline prices are up considerably from pre-embargo levels and the public's perception of these prices and the possibility of further increases may be leading to a gradual restructuring of travel habits.

METROPOLITAN EXPERIENCE

A limited sampling of the experience in several large metropolitan areas has revealed the following information, which is discussed below:

1. Ridership increases experienced during the energy crisis and the ridership decreases experienced during the recent recession conformed to the results of the analyses discussed above.
2. Several transit operators in these cities also revealed the existence of plans to increase transit service in order to respond to severe energy shortages.
3. Based upon the experience in Washington, D.C., and Atlanta, Georgia, the construction of a rapid transit system will significantly reduce the levels of unemployment in a large metropolitan area.

Both Atlanta and Minneapolis have had ridership increases during the energy crisis which conformed to the national estimates. In Minneapolis, it was estimated that the energy crisis was responsible for a 6% increase in transit ridership. In Atlanta, it was hypothesized that the energy crisis was responsible for continuing a 10% annual growth in ridership for a longer period than it would have been the case without the energy shortage.

Although most cities could not estimate the effect of increased unemployment on transit ridership, some figures from Atlanta tend to support the national figures discussed above. In Atlanta in September 1974 the unemployment rate was 5.0%, while transit ridership was increasing at a 9.1% annual rate. By March of 1975 the unemployment rate in Atlanta was over 10%, and the growth in transit ridership was reduced to 5.3%. Thus a very large (5%) increase in unemployment corresponds to only a relatively small (3.8%) decrease in the growth rate of transit ridership; these figures tend to confirm that the unemployment rate has only a small effect upon transit ridership.

Several of the cities contacted indicated that they had plans for coping with future energy shortages. In Washington, for

example, two general studies were done by the Washington Metropolitan Area Transit Authority (WMATA) staff. One study was predicated on the assumption of "sudden notice of almost complete unavailability of gasoline for private automotive use" and the second study assumed reductions in auto driver trips of 10, 20, and 30 percent for the years up to 1990.

The first study indicated the steps which would have to be taken in order to provide public transportation for the travel needs of nearly all of the residents in the Washington area. Steps included staggering work hours, exclusive use of many streets for transit, the use of school buses, sight-seeing buses, military buses, plus the accelerated delivery of new buses. These actions would result in a significant increase in operating deficit, roughly estimated at \$100,000 per day.

The second study in Washington was done in greater detail, and concentrated on the additional rolling stock required and the operating deficit resulting from the reductions in auto driver trips of 10, 20, and 30 percent in the metropolitan area over a period of 15 years. Over the period until 1990, the additional rolling stock required to meet the increases in transit ridership in the Washington area is not alarming, ranging from 371 to 620 additional buses. Most of the increase in transit ridership in the Washington area was assumed to be handled by the new subway system which is already under construction. Thus, much of the effect of the reduction in auto driver trips was easily handled by the very large increase in transit capacity already planned.

In Minneapolis, the transit agency has 160 old buses which it is storing for an emergency. According to the Twin Cities Area Metropolitan Transit Commission, these 160 buses could easily handle the increases in transit ridership expected from energy reductions of at least twice the magnitude of the recent energy crisis.

Information indicates that the employment generated by the construction of regional rapid rail transit systems in both Washington, D.C., and Atlanta could equal 2% of the regional labor force. In Washington, there are currently about 8,000 construction workers plus 1,000 WMATA employees and consultants working on the new rapid rail system. Assuming that the local multiplier adds 80% more jobs, the total number of Washington area jobs related to the subway construction is over 16,000. This is more than 1% of the total Washington D.C. labor force and may be responsible for keeping the unemployment rate much lower than the national average. A senior official in a large engineering consulting

firm working with WMATA indicated that the reason the unemployment level in the construction industry in Washington, D.C., is very low compared to the national average of 18% unemployed is because of the existence of the construction jobs on the new subway.

In Atlanta, a recent study^{1/} showed the increase of employment attributable to the construction of MARTA in the five-county Atlanta SMSA would be over 21,000 jobs for 10 years. This figure indicates that the construction of a rapid transit system in Atlanta would directly or indirectly employ 3% of the Atlanta labor force for 10 years.

The Atlanta figure is not based upon any actual construction and thus may be slightly high. The Washington figure may somewhat understate the impact, since all of jobs directly attributable to the subway construction may not be accounted for, and the local multiplier may be a little low. Considering these factors, a compromise figure of about 2% of metropolitan area employment attributable to the construction of a rapid transit facility is probably reasonable.

1/ Larry D. Schroeder, David L. Sjoquist, and Paula E. Stephan, Impact on Income and Employment Resulting from MARTA Construction Expenditures, prepared at the request of Robert W. Nelson, Assistant General Manager for Finance and Admin., MARTA, February 1975.

POTENTIAL ACTIONS TO INCREASE TRANSIT
RIDERSHIP AND CONSERVE ENERGY

This chapter describes a variety of actions which can be taken to increase transit ridership and conserve energy as well as the present state of knowledge or experience in their application. These actions can be divided into two categories: transit incentive and auto restraint. The first category includes actions for improving transit service or reducing the cost of transit to potential users. The second category includes actions to increase the cost of automobile travel or to regulate automobile use which would have a direct relationship to transit.

Transit Fare Reductions

Actions at the national level to reduce transit fares can have significant impact on nationwide transit ridership. A standard industry figure for the effect of fare changes on ridership is that a 1% decrease in the transit fare causes a .33% increase in transit ridership. However, most of the experience used in developing this relationship consisted of small fare changes. Analyses carried out in this study and by others suggest that merely projecting this relationship for larger fare reductions would underestimate the effect on ridership. For example, a fare reduction from 40¢ to 15¢ in Atlanta is estimated to have caused a 28% increase in ridership 1/ whereas use of the industry standard figure would have predicted only a 20% increase.

A rough analysis of free fare transit described in the project report estimates that 40-60% increases in transit ridership may be anticipated by totally eliminating the out-of-pocket cost of transit travel. In addition, system service to users would be improved by eliminating the time and inconvenience of fare collection. This might cause an additional 10% for a total of about 50 - 70%.2/

1/ The Effect of Fare Reduction on Transit Ridership in the Atlanta Region, Technical Report Number 2, Analysis of Transit Passenger Data, Metropolitan Atlanta Rapid Transit Authority, Atlanta, Georgia (February 1974), page 80.

2/ Project estimate based on various empirical studies of travel behavior changes in response to travel time changes -- see Appendix of full project report.

A desirable feature of generating ridership increases through fare reductions is that proportionally larger increases occur in the off-peak period when there is substantial excess capacity. The Atlanta fare reduction, coupled with service improvements, caused a 19% ridership increase between 6 A.M. and 9 A.M. on weekdays, compared with a 37% increase during the 9 A.M. to 3 P.M. off-peak period on weekdays and a 79% increase on Sundays. ^{1/} The ridership increase estimated for no fare transit could be accommodated by a 30% to 50% increase in the size of the fleet.

This increase in the size of the transit fleet would attract an additional 10% increase in transit ridership. The net effect of no fare transit plus a 30% to 50% increase in the size of the transit fleet would be about a 60% to 80% increase in transit ridership.

Further, large increases in transit ridership could be generated with virtually no increase in the size of the transit fleet by maintaining peak-hour fares and reducing or eliminating off-peak fares. It is estimated that complete elimination of off-peak fares could increase total transit ridership by 30-40% on a national basis. ^{2/}

Significantly increasing transit ridership through fare reductions would require a large increase in transit subsidies. In 1974, transit operating expenses (including depreciation) were just over three billion dollars. If transit fares are totally eliminated and transit service is increased 40% by 1980 to accommodate the increase in ridership, the transit deficit would be more than four billion. In fact, just holding transit fares at a constant dollar level (which represents a fare reduction in real terms as incomes and prices of other goods increase with inflation) would cause a 15-20% ridership increase by 1980 but would require roughly all of the UMTA Formula Grant Funds with 50% local matching to cover operating expenses -- without allowing any funds for transit service improvements. ^{3/}

As regards the energy implications of fare reductions, it is likely that without complementary auto restraints, less than 50% of the riders attracted to transit would otherwise have been auto drivers. Auto driver diversion estimates range from 28% of the new riders attracted by the establishment of a no fare zone in Dayton, Ohio to 42% of the new riders attracted by the Atlanta fare reduction. ^{4/}

^{1/} Op. Cit., The Effect of Fare Reduction on Transit Ridership in the Atlanta Region, page 25.

^{2/} Project estimate -- see Appendix of full project report.

^{3/} Project estimate, assuming that operating expenses increase at 10% per year (a conservative assumption based on past experience).

^{4/} Op. Cit., The Effect of Fare Reduction on Transit Ridership in the Atlanta Region, page 68.

Fare reductions can be implemented to promote transit use by particular groups (e.g. senior citizens' discounts) or to promote transit use during particular time periods (e.g. Boston subway fares are 25¢ in the peak period and 10¢ in the off-peak period). Also, beyond the obvious mechanism of reducing the fare paid upon entering or leaving transit vehicles or stations, fare reductions might be implemented through the sale of pre-paid passes to specific groups or to the general public.

Transit Priority Traffic Controls

Techniques for giving transit vehicles priority over other vehicles on existing facilities include (1) reserving lanes for buses on urban arterials and highways, (2) preferential treatment for buses at bridges, tunnels and freeway access points, and (3) bus-actuated traffic signals. Over 200 bus priority treatments have been implemented or proposed during the past decade. The results of these experiments have shown that transit priority treatments have high potential for increasing transit ridership and diverting auto users by increasing bus speeds and reliability. However, the circumstances required for successful operation of major bus priority treatments such as reserved bus lanes limit their potential to promote significant ridership increases to large metropolitan areas which can generate more than 4000 riders per hour in transportation corridors not already served by rail transit. Thus, while in selected corridors bus priority controls can be a very cost-effective way of increasing transit ridership and decreasing automobile use, their potential to affect transit ridership and energy conservation at the national level is limited.

Shelter, Stations, and Park-Ride Facilities

Construction or upgrading of shelters, stations and park-ride facilities can have a high payoff in terms of attracting new riders per dollar of investment because they are relatively inexpensive and can substantially improve the comfort and convenience of transit travel.

Transit Service Expansion

Increases in the number of transit vehicles can promote ridership increases by allowing for more frequent service on existing lines and enabling the development of new lines and new types of transit service. Also, unless rolling stock increases are included with other actions to promote transit ridership increases, the effectiveness of these other actions may be limited by the service deterioration associated with increased crowding in vehicles.

The micro-analysis of key suppliers of rolling stock indicated that bus production could be increased from 4,800 in 1974 to a rate of 10,000 new units per year during 1976 if the market warranted and if suppliers of key components can improve production rates as readily as the prime manufacturers. Assuming that production could be expanded to about 16,000 per year by 1980 and the retirement rate stays roughly constant over this period, the size of bus fleet could be approximately doubled by 1980.

If the number of transit vehicles operating at any given time is doubled, the time riders spend waiting at transit stops would approximately be cut in half. Based on empirical studies of travel behavior, this could produce ridership increases of 10-25% in the peak period and 30-50% in the off-peak period (when wait times are longer and doubling the frequency of service would have a greater impact). 1/

The reduction in auto driver trips associated with reduced transit wait times would slightly exceed the reduction in auto driver trips generated through a transit fare reduction. This is because those who have chosen to travel by auto rather than transit are typically paying higher dollar costs for the speed and convenience of the automobile and thus would be expected to be relatively more responsive to time savings than to fare reductions.

Transit service can also be expanded by the development of new local bus lines. However, opportunities for realizing significant ridership increases in this manner are limited by the current high density of coverage in most urban areas.

More promising is the development of new express bus services such as the "Blue Streak" project in Seattle and the "Capital Flyer" in Washington, D.C. These services involve high-speed buses between the CBD and outlying areas utilizing urban free-ways for the line-haul portion of the trip and local streets for collection and distribution. The residential end of such services usually includes park and ride facilities and, in rare cases, feeder bus lines.

Many cities have reported significant ridership increases with the initiation of express bus services and, as in Portland, Oregon, contemplate new lines when additional equipment becomes available.

1/ Project estimate based on various empirical studies -- see Appendix of full project report.

Some express bus demonstrations have reported that over 50% of new riders would have otherwise made the trip by automobile. However, the variation among new express bus lines is considerable in terms of reported diversions.

Transit service expansion may also involve the production and use of smaller transit vehicles designed to fill the gap between conventional transit and the private automobile. The use of such vehicles, particularly with recent technological advances in the development of flexible "demand actuated" routing systems, can attract significant patronage by tailoring service to the mobility needs of particular groups. In one metropolitan area, it was estimated that a 15% increase in transit ridership would result from a carefully designed metropolitan-wide program of this type. ^{1/}

Transitway Capital Improvements

Capital intensive improvements to transitways include the construction or upgrading of conventional rail rapid transit lines, exclusive busways, light rail transit, and people mover and personal rapid transit systems. In the short to medium term, only light rail transit on abandoned or under-utilized rail lines can be viewed as having high potential to generate transit ridership increases. This is because the implementation period of new, fully grade-separated transitways is 10 to 20 years.

Land Use Controls

Land use controls such as zoning to achieve higher densities or to encourage mixed-use cluster development can have a profound effect on the mode split of travel by causing activities to be located in patterns that are well served by transit. However, these measures require an extended period of time to achieve results. The long range potential is discussed in the last section of this summary. In the short to medium range, the potential for land use controls to affect transit ridership is primarily through using municipal standards such as building codes to affect the supply of parking in areas where good transit service is available.

Increasing the Price or Limiting the Availability of Gasoline

Reductions in gasoline consumption could occur through a variety of mechanisms including restrictions on oil imports, taxes on imports, rationing, and taxes on retail sales. Reductions might also result from future embargoes.

^{1/} The Urban Transportation Task Force 5-County Transit Study, Ten-Year Transit Development Program, Alan M. Voorhees and Associates, Inc. et. al., Cleveland, Ohio; (August 1974), page 80.

As a means for investigating the relationship between gasoline availability and transit ridership, a time series analysis using monthly data from before, during and after the recent embargo was carried out as part of this study. The analysis led to an empirical relationship between changes in transit ridership and highway vehicle miles of travel (VMT) on a national basis. In essence, the relationship implies that an annual increase of 4% in highway VMT will have a neutral effect on transit ridership just balancing an increase in the total demand for travel if transit fare and service levels remain unchanged. A higher rate of growth in highway VMT -- such as observed from 1969 to 1972 -- will cause transit ridership to decline, and a lower rate of growth or a decline in highway VMT -- such as observed during the recent embargo -- will lead to increases in transit ridership.

The key variable in relating gasoline consumption to VMT is the fuel efficiencies of highway vehicles. By purchasing more fuel-efficient automobiles, drivers can increase VMT with less than proportional increases in gasoline consumption. Studies of the market response to gasoline price changes have shown this effect to be significant.

One study estimates that with a gasoline price increase of 1%, drivers will reduce gasoline consumption by .07-.14% during the short term when the only means available for reducing consumption is to make fewer and shorter automobile trips. However, in the long term, decreases in gasoline consumption twice that size are estimated, due primarily to the purchase of more fuel-efficient automobiles. 1/

As a result of the gasoline price increase following the embargo, it is estimated that the average fuel efficiency of the passenger car fleet will increase from 13.3 miles per gallon in 1974 to about 16.5 miles per gallon in 1980 if the current price of gasoline remains stable in real terms. 2/ This will enable an annual growth on VMT of 4% per year with less than a 1% per year increase in gasoline consumption. As noted above, this rate of growth in VMT would have a neutral effect on transit ridership.

1/ A Study of the Quarterly Demand for Gasoline and Impacts of Alternative Gasoline Taxes, Data Resources, Inc., Lexington, Mass. (December, 1973); page vii.

2/ Project estimate based on material presented in Pollard, Hiatt and Koplow, Summary of Opportunities to Conserve Transportation Energy, prepared for U.S. Department of Transportation, Office of the Secretary.

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Actions to further increase the price of gasoline or limit its availability will cause additional increases in engine efficiency and promote some increases in transit ridership. However, the effect is limited by the tendency of drivers to purchase more fuel-efficient autos rather than reduce their driving. For example, a gasoline price increase of 50% in 1975 would increase average fuel efficiency to more than 18 miles per gallon by 1980 and cause a net increase in transit ridership of about 5% from 1974 to 1980. ^{1/} As a more extreme case, if crude oil imports (currently 6 million barrels per day) are cut 100% by 1980, transit ridership would increase by about 25% over this time period. ^{2/}

Parking Taxes or Regulation

Parking taxes or regulation of the supply of parking have been advocated in many metropolitan areas as a way of controlling the automobile. These actions are relatively easy to administer and require little or no investment. Restraints on parking in downtown areas where there is good transit service could generate significant ridership increases, particularly if they are combined with the development of low-cost peripheral parking at suburban transit stations.

In considering the practicality of parking restraints, it is important to distinguish between short-term parking (used primarily by shoppers) and long-term parking (used primarily by commuters). Restraints on the former would be opposed by local merchants since they are in competition with other areas for retail trade. On the other hand, restraints on long-term parking in central business districts and other areas where good quality transit service already exists would not have the same negative impacts. However, unless these restraints cover all those commuters who currently park for free in central business districts, the reduction in auto travel will be minimal. This is because in the CBDs of most major metropolitan areas, more than 40% of employees currently park on the street or in spaces provided free by employers and it is this group that would be most affected by parking restraints.

In order to gauge the effect of parking restraint actions on transit ridership, a rough analysis of the effect of a \$1.50 increase per day in the cost of all commuter parking in employment areas currently well served by transit was carried out. In a typical metropolitan area, this area might include 20% of total employment. Despite the fact that this action would bear on less

^{1/} Project estimate -- see Appendix of full project report.

^{2/} Ibid.

than 5% of metropolitan area auto trips, it was estimated to produce a 15% increase in total transit ridership ^{1/} -- significantly more than the ridership increase produced by a 50% increase in the price of gasoline. This is because it is an auto restraint action aimed directly at those drivers who could most easily shift to transit.

In terms of energy conservation, this action represents a very efficient use of public transit since more than 80% of the new transit riders would have otherwise been auto drivers. However, a disadvantage of this action is that the increase in transit ridership would be concentrated in the peak period, necessitating a 20-30% increase in the size of the transit fleet.

Summary Assessment of Actions

In this section, a variety of transit incentives and auto restraint actions were described and their effectiveness in increasing transit ridership and decreasing energy consumption was assessed.

To illustrate the relative effectiveness of actions which could have a significant nationwide effect on either transit ridership or energy consumption or both, assumptions were made regarding levels at which these actions could be implemented on a national basis and rough estimates of their effects were developed. The results of these analyses are shown in Figure 6.

The results of the admittedly rough analyses described in this section and illustrated in Figure 6 lead to conclusions which have major implications for public policy regarding energy, the economy, and mass transit:

- The impact on 1980 energy consumption of a 50% increase in the price of gasoline is an order of magnitude greater than the impact of any transit incentive actions.
- However, considering its impact on energy consumption, the impact of a 50% increase in the price of gasoline on transit ridership is relatively slight, causing a less than 10% increase. This is because the primary long-term response of motorists to gasoline price increases is to purchase more fuel-efficient automobiles rather than alter their travel behavior.

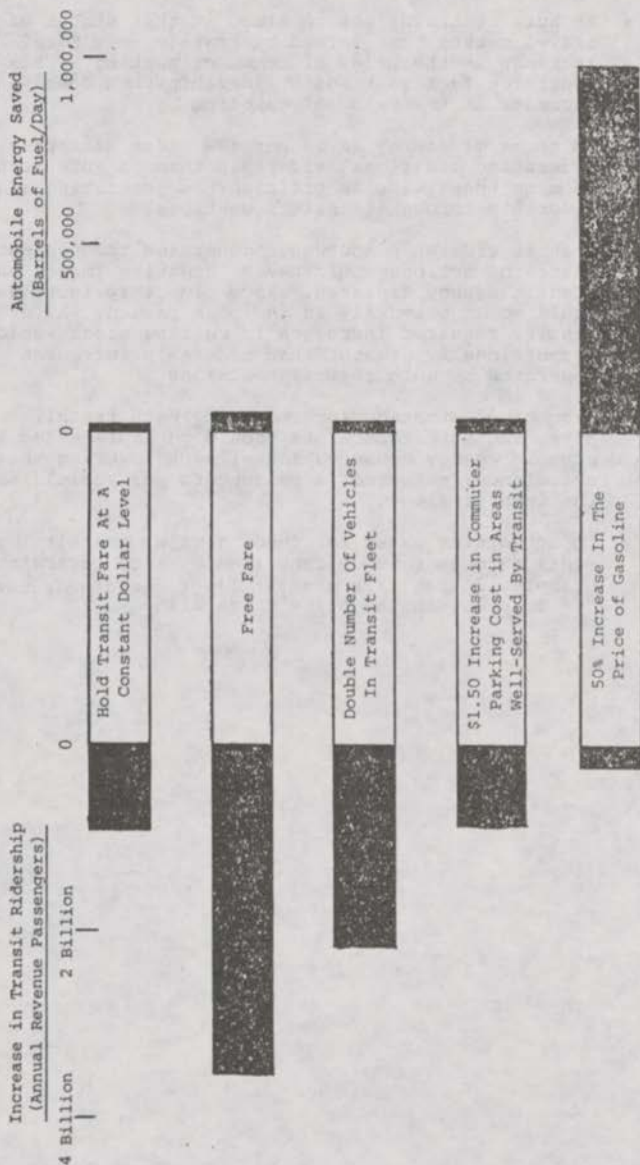
^{1/} Ibid.

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- An auto restraint action aimed at that sector of the travel market best served by transit -- a \$1.50 /day increase in the price of commuter parking -- has a far greater effect on transit ridership than does a 50% increase in the price of gasoline.
- In terms of energy saved per new rider attracted, generating additional ridership through auto restraints is more than twice as efficient as generating additional ridership through transit incentives.
- Transit ridership increases generated through auto restraint actions would have a negative impact on transit agency finances, since ridership increases would occur primarily in the peak period. As a result, required increases in rolling stock would be proportionally greater than ridership increases generated by auto restraint actions.
- A combined strategy incorporating both transit incentives and auto restraints should be implemented to promote energy conservation without lowering the efficiency (measured in passengers per vehicle) of the transit fleet.
- Opportunities exist for funding major transit improvements through revenue generated by auto restraints. For example, a free fare transit fleet could be funded by a 50% increase in the price of gasoline.

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Figure 6:
EFFECTIVENESS OF TRANSIT INCENTIVE
AND AUTO RESTRAINT ACTIONS



Source: System Design Concepts, Inc.

Opportunities for Combining Transit Incentives and Auto Restraint Actions

Findings presented in the previous sections suggest a number of instances where transit incentive and auto restraint actions would prove to be highly complementary if implemented together.

1. Fuel taxes, a particular type of road user charge, can be used as a method of restraining automobile use or conserving fuel as well as a major means for raising revenue to support transit improvements. There has been a great deal of resistance to the use of substantial fuel taxes on the order of 20¢ to 40¢ per gallon, based largely on the burden it would cause low and moderate income households who are dependent on automobile transportation for essential travel. This burden could be alleviated by selective tax rebates, as has been seriously proposed in draft legislation. What may not have been clearly recognized, however, is the direct substitutability of transit service, particularly if transit is substantially improved, within metropolitan areas. Full rebates of new fuel taxes could be provided within rural areas and small, non-metropolitan communities where public transit could not be provided at substantial savings in cost and energy consumption, as is the case in metropolitan areas.
2. Taken alone, transit improvement actions are limited in their potential to promote large reductions in the consumption of transportation energy by virtue of the fact that less than 50 percent of the new riders attracted by major actions of this type would otherwise have been auto drivers. However, coupling these actions with auto restraints aimed at those auto drivers which can most easily divert to transit (e.g. through an increase in the CBD commuter parking charges) will enable a significant increase in energy savings per new transit rider.
3. Taken alone, auto restraint actions tend to concentrate associated transit ridership increases in the peak period, leading to more than proportional increases in manpower and capital requirements. In the off-peak period, buses stand idle or make runs nearly empty and drivers collect wage bonuses for split shifts. This suggests that

auto restraint actions should be combined with off-peak transit incentives (e.g. off-peak fare reductions) to divert where possible transit use from peak to off-peak periods and to enable more productive use of transit resources.

NATIONAL POLICY ISSUES AND POSSIBLE INITIATIVES

The discussion of policy initiatives in this final section has three parts:

(1) Options within the framework of current UMTA and Related Programs -- This contains a discussion of the types of actions that can be taken within the framework of the existing UMTA program to effectively respond to potential future energy shortages and/or economic downturns. Consideration is given to four basic types of actions which can be taken:

- Changes in Funding Levels and Distributions among Program Categories
- Changes in Statutory and Administrative Regulations
- Adoption of Special Incentives
- New Emphases in Planning Activities

(2) Possible New Initiatives -- A discussion of what Congress might consider beyond the scope of the present UMTA program to achieve substantially increased transit ridership, to conserve oil and other forms of energy, to achieve economic objectives and other national goals related to public transportation. The initiatives considered include:

- No fare and reduced fare transit
- Direct use of substantial new gasoline taxes to support major new transit initiatives
- Use of parking taxes to encourage a substantial shift to transit where feasible
- Doubling of transit operations by an order-of-magnitude within the near future
- Initiatives within the highway program to give priority to transit

(3) Long Run Considerations -- A discussion of the potential energy, economic and environmental benefits achievable in the long run if new transit and other transportation initiatives are directly linked with (as distinct from coordinated with) land development controls and community development programs. Mechanisms for achievement of these benefits are discussed.

Options Within the Framework of Current UMTA and Related Programs

There appear to be four types of potential Federal initiatives within the present public transportation program framework:

(1) changes in funding levels and distributions among program categories; (2) changes in statutory and administrative regulations; (3) adoption of special incentives; and (4) new emphases in planning activities.

(1) Changes in Funding Levels and Distributions among Program Categories. From the standpoint of UMTA's ability to approve grants and disburse funds within the existing program structure, there is little possibility for major increases in the rate of spending for capital grants until F.Y. 1978 or possibly even F.Y. 1979 in view of the large carryover of unused authorizations. Any immediate increases in authorization over what is now provided by law should be coupled with Congressional action which would significantly simplify UMTA's administrative requirements.

The major change in distribution of funds which might be considered within the near term would be an increase in the statutory allocation to the Formula Grant funds which may be used for either capital or operating assistance. Indications are that the national level of demand for these funds for operating assistance will exceed the authorized levels easily for both F.Y. 1976 and 1975 at 50% matching.^{1/} Although the agency is just learning how to administer this new fund, the time requirements for disbursing these funds would not be increased if the amount distributed by formula was substantially increased.

A major change which would accelerate the flow of funds would be either an across the board reduction in local matching ratios or authorization for UMTA to reduce the local match under specified conditions. This will be considered further below under "Adoption of Special Incentives."

A permanent reduction in the 50% match for Formula Grants would escalate the issue of Federal vs. state-local responsibilities for the scope of subsidized operations. However, a temporary reduction in the local match would provide a quick means of meeting new transit demands.

(2) Changes in Statutory and Administrative Regulations. The present limitation on maximum state participation in national funds is 12 1/2%. Several states could have need for capital grants in excess of this limit at particular times over the next several years.

^{1/} Authorized Federal funds for Formula Grants for F.Y. 1975 through 1980 are, in millions: \$300, \$500, \$775, \$850 and \$900.

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A requirement which has been a problem for some smaller metropolitan areas making simple applications for bus purchases, etc. has been the need to demonstrate the existence of a continuous and coordinated comprehensive planning process. This is likely to be a problem again for many small cities as they now seek participation under the new Formula Grant program. UMTA could be authorized to waive this provision for small urban areas for simple actions such as the purchase of a few buses or for operating assistance.

UMTA should also be allowed to waive the requirements for public participation in the planning process and for the entire EIS process in cases involving no substantial construction or increase in the size of the bus fleet. If the transit operator serves only the central city it might be feasible to forego the A-95 coordination.

The above liberalizations would speed up projects, particularly in areas under 250,000 population where there is little experience or need for such planning and review requirements.

UMTA could be given authority to make these waivers for larger areas during emergency situations such as the oil crisis. However, experience indicates that the larger the area, the greater the need for the present planning requirements. The waiver should be based on evidence that a provision of the law is restrictive under emergency circumstances.

The present highly centralized structure of UMTA is frequently cited by transit planners and operators as an important and unnecessary cause of delays in implementing programs. It is wasteful to have virtually all routine approvals made in Washington, which is now the case. The program could be significantly accelerated by increasing the competence of field office staff, using FHWA field personnel in many instances, and delegating a large proportion of decision-making responsibility to them, including, for example, most contract approvals, action on operating subsidy grants and capital grant applications involving bus purchases and other moderate size facilities not involving commitment to the construction of new fixed guideway routes. FHWA has operated this way for many years.

(3) Adoption of Special Incentives. By use of powers to waive some portion of the local match in return for adopting objectives which Congress believes should have a high priority, UMTA could break some local bottlenecks, accelerate desired improvements, or provide incentives for actions which would not otherwise be taken.

A wide array of actions which can be taken to increase ridership on transit were reviewed. Most could be applied immediately if the necessary incentives were offered, such as the reduction of local matching funds. The fact that the current Formula Grant program's local match requirement is so high (50%)

provides a good opportunity to achieve desired national objectives through the incentive of increasing the Federal share for any projects which meet specified criteria which are otherwise hard to achieve. A change in the law would be required to permit UMTA to lower the local matching requirement. UMTA would have to have policy guidance from Congress on criteria to be used.

One desirable response to a severe fuel shortage would be an extension of coverage by use of innovations such as "para-transit" (e.g. jitneys) and "demand-responsive" or "Dial-A-Ride" services. A major cause of the slowness in adopting these innovations has been the institutional blocks. Once the incentive policy is accepted it can be used to obtain such ends as the use of existing operators (taxis, limousine services and transit operators) to provide jitney services instead of fighting them.

At the opposite end of the service scale are large capital projects for grade-separated modes. The initiation of these projects has been hampered by state-local financing requirements -- e.g. bond issues which must be passed by several jurisdictions. Where plans were already fully adopted UMTA could often avoid these bottlenecks by raising the Federal share.

(4) New Emphases in Planning Activities. All metropolitan areas should prepare emergency fuel conservation plans, such as the Washington, D.C. effort. More detailed planning would be desirable in most cases. The plan should emphasize obtaining the maximum short run increases in effective public transportation capacity with available public and private vehicles.

Fortunately the evolution in understanding of the proper role for transportation planning has recently been toward greater emphasis on short term planning -- greater concentration on the resolution of current issues and on an incremental approach to plan-making. There is also growing awareness that important transit benefits can be obtained relatively quickly and at low cost through traffic engineering and traffic regulatory measures, particularly those which give priority to bus operations. Also many metropolitan areas have outmoded route structures which are in need of complete reassessment making use of new concepts and tools to provide greater efficiency and quality of service. UMTA is beginning to encourage this type of planning. Substantially more planning funds can be devoted to these types of activities which will have much greater near term pay off and which will provide transit operators with a much greater capacity to respond to a future energy crisis or other emergencies.

If the time horizon is extended beyond five years there are compelling arguments for acceleration of planning work. Most urban areas do not have up-to-date comprehensive, coordinated plans based on recent, high quality ridership and traffic surveys. Additional funds could effectively be made available to re-evaluate out-of-date transportation plans and to creatively develop plans which make better use of new understanding which has been gained in the last few years. This could be done by making available between one and two dollars per capita per year for every area with the expectation that this rate of expenditure could be productively utilized in most metropolitan areas within a relatively short period -- about \$150 to \$300 million per year nationally.

As discussed in the final portion of this section, there are convincing arguments that a major reorientation of suburban and exurban land development patterns and trends should take place. Achievement of more orderly, coherent land development will require widespread changes in views on the future forms of land use by all levels of government. Any broad consensus will require several years to evolve and this type of planning research is greatly needed in each major metropolitan area to assist in shaping that consensus.

The Potential Applicability of the Above Actions to Near Future Economic and Energy Alternatives

1) Economic Recession. Under this assumption the economy is expected to begin recovery within the very near future. Increases in the rate of expenditures will require much more time for their effects to be felt in terms of creation of jobs because of the time requirements involved in grant approvals, project planning and engineering, etc. Hence the discussion become more applicable to future recessions.

Some moderate effects in creating jobs could begin to be felt within perhaps six months of a decision to increase the amount of Formula Grant funds so that the level of transit operations could be significantly increased, thereby creating more jobs for drivers, mechanics, etc. About 80 man years of employment will be generated for each million dollars.

A policy of increasing UMTA expenditures for transit operations as opposed to capital improvements has two important advantages as an anti-recessionary policy:

- Its effect will be felt much more quickly. Once the program is in full operation it will be possible to affect employment through increases in operating assistance expenditure rates within perhaps as little as a single quarter.

- Because of the difference in matching ratios, the Formula Grant program can theoretically result in 60% greater impact for each Federal dollar spent. (This is somewhat of an exaggeration of the difference in effect because of the fact that local matching funds will tend to be partially shifted from other jobs creating expenditures rather than from net increases in expenditures.)

(2) Economic Depression. Since we are already well into a deep recession, which appears likely to bottom out by the third quarter of 1975, the needed response would be short run in character, with results required before mid-1977. Within this time frame the flow of Formula Grant funds could effectively be increased substantially, either through additional transfers into the Formula Grant authorization or a reduction in the present 50% matching ratio requirement with an offsetting increase in the total Federal program level.

The types of special incentives discussed under "Changes in Statutory and Administrative Regulations" should be considered.

If the depression were to have the potential for running beyond 1977 as assumed in our worst case analysis, then the acceleration of capital grants could begin to have significant impact on employment in several metropolitan areas and in equipment supplying industries, but only if a policy of lessening Federal requirements were enunciated and energetically pursued along the lines discussed.

(3) Economic Recession + Mild Energy Decrease. Same as Economic Recession above.

(4) Recession + Moderate Energy Decrease. Same as Economic Recession plus application of the first special incentive -- fostering expansion of ubiquitous, low capital cost, low capacity transportation systems in areas with little or no existing transit service. Jitney and Dial-a-Ride services on a scale proportionate to demand should make it much more practical to cope with significant reductions in private auto trips. Efforts should concentrate on the heavier, more aggregated trip flows where it would be most efficient to provide a good quality of substitute public service.

(5) Depression + Severe Energy Decrease. This will place the maximum demands on the program. The Severe Energy Decrease, if introduced in the present period of recession, would lead to depression, and the length of the period of distress would be significantly longer than for the other alternatives so that long term considerations become more important. The present UMTA program framework could still be utilized but the overall funding levels should be substantially increased. UMTA's speed and effectiveness of administrative action would have to be improved immediately to cope with increased program levels.

It would be desirable to implement three of the modifications to the present UMTA program outlined above: (a) reduce local matching shares, both capital and operating funds, (b) increase the relative proportion of all funds going to operating assistance, and (c) remove some of the constraints such as the maximum state participation ratio, the planning requirements for operating assistance and small capital expenditures for rolling stock purchases, and various project planning process requirements.

Special incentives should be adopted as described for increasing the coverage of transit services and for accelerating the start of major fixed investment systems.

The long run implications of this most drastic of the alternatives call for a major, immediate effort to revise area-wide transportation plans and to evaluate alternative land use-transportation configurations and implementation measures.

Possible New Initiatives

The preceding discussion can be characterized as cautious because it asked only what might be done within the framework of the existing UMTA program to address potential problems. This section, by contrast, will explore several of the most promising initiatives that Congress might take beyond the current commitment to transit. This discussion assumes that it is preferable to take positive action now to reduce energy consumption and to increase transit ridership, rather than to merely be prepared to accommodate future emergencies when they occur.

Analysis shows that current policy will not result in energy conservation and will not result in any dramatic increases in transit use. A continuation of current policy, when viewed from an overall national perspective, will probably result in an approximate stabilization of transit's proportionate role in urban transportation. Unless there are future substantial energy shortages, automobile use will grow at roughly 3% or more per year. Transit systems will be improved in amenity level, but the overall extent of service will not change very much in percentage terms, nor will average transit fares as a whole. Thus transit improvements will be just sufficient to prevent further significant decline in patronage, but not enough to change transit's competitive position with respect to the auto/highway system.

Analysis also shows that there are a wide variety of actions that can be taken which can improve transit ridership and/or decrease energy consumption. Their effectiveness varies widely. Out of a large number of potential actions analyzed most actions

are not likely to affect as much as a ten percent increase in ridership nationally and none could individually result in a doubling of transit use over the next five years. However, the most ambitious and effective actions could result in reaching and even exceeding the doubling of ridership benchmark if the actions are taken in combination with each other. Many of the actions when taken alone cause problems which can be offset by other actions considered.

The attractiveness of combining different major policy actions is, in fact, one of the major findings of this analysis. There are several aspects of this finding regarding the complementarity of different actions which will be brought out in the consideration of each of the more important policy actions below:

No Fare and Reduced Fare Transit. Moderate success in keeping fares down or achieving reductions has been achieved recently. The long term rate of increase in fares has been reduced to about the inflation rate or less. Making funds available for operating assistance will probably assure a stabilization of fares, over the next few years perhaps even in constant 1975 dollars -- i.e. generally keeping the same cash fare despite inflating costs.

The NMTA Act of 1974 authorized \$20 million per year for two years for no fare demonstrations in several cities, but no funds have been appropriated and none have yet been requested by UMTA.

There may be a lack of recognition of the costs involved. The \$20 million per year will not cover area-wide no fare transit demonstrations except in the smallest metropolitan areas. It would cost several times that amount for the Washington, D.C. metropolitan area alone.

If there were no new ridership, no fare transit would have cost about \$3 billion in 1974 nationally. About 50 to 80% ridership increase could be expected, however, raising the cost of no fare transit to about \$5 billion per year in 1974 dollars if it is assumed that transit operations would be increased to hold loan factors approximately constant.

No fare transit in the off-peak periods only would cost substantially less -- roughly one billion in 1974 dollars over current levels of operating assistance, and would provide many of the benefits of round-the-clock no fare transit.

No fare transit would produce the largest increase in transit ridership of any action that has been considered. Additional advantages of such an action include:

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- Greater increases in off-peak ridership and therefore better utilization of manpower and equipment. This would be particularly true of an off-peak no fare program.
- Compared to most of the other actions considered, it could be implemented relatively easily on a national basis through Congressional action.
- Benefits would generally be greatest among those most in need of increased mobility -- the young, the elderly, the poor and many of the handicapped. Off-peak no fare transit would concentrate the benefits among these groups to an even greater extent.
- It would necessarily result in improvement of service, in part because it would do away with the inconvenience to users of having to have exact change, and in part because it would permit faster transit operations.
- The increase in ridership resulting from no fare in peak periods would require a 30 to 50% increase in transit operations thereby causing substantial increases in frequency and coverage of transit service -- in itself one of the most effective actions which can be pursued. On the other hand an off-peak no fare program could be implemented without any peak hour increases in frequency of service, but would require off-peak increases.
- No other action could produce such large scale results so quickly. Capital investment in rapid transit systems in the same order of magnitude (\$5 billion/year) could probably produce similar ridership increases, but probably not within 10 to 15 years.

On the negative side, such a policy would be difficult to reverse -- one good reason for demonstrations before making a national commitment.

Another objection is that unnecessary, frivolous travel will be encouraged causing unjustified public costs. To some extent this may happen, but limited experience indicates it would not be a serious problem. Frivolous use of transit is not likely to occur in peak periods when crowding might occur. Reduction of fares to low values (e.g. 10¢ to 25¢) might accomplish much of the objectives of a free fare program while limiting these problems.

A third negative argument is that other types of public transit improvements are more effective in achieving the same objectives. This has much validity within a limited framework. Various types of service improvements can be more cost effective when the service improvements can be made at moderate marginal cost and in areas where demand is very sensitive to the level of service. However, there are many conditions under which it is more cost effective to lower or eliminate fares than to improve service. This occurs, for example, when costs of improving service are very high such as when it would be necessary to construct grade-separated rapid transit in order to improve service. It occurs also when service improvements will yield few additional riders because the level of service is already quite good, or when fares are very high. Fare reduction or elimination is also most cost effective in lower income areas. When considering very major potential investments in transit, many of these diminishing returns come into play.

More importantly, the combination of service improvements and fare reductions becomes quite clear when considering major improvements. Fare reductions without service improvements will cause greater crowding and hence make service improvements critical. Similarly, service improvements alone will effectively attract higher income transit users but will have little influence on lower income potential users if fares are high.

A no fare or substantially reduced fare program nationally would probably have to involve a higher Federal matching ratio than the current 50%. At that matching ratio, state and local governments would have to increase their subsidy for transit operations by about \$2 1/2 billion to cover the full cost. They almost certainly would not, or could not do so. An increase to 80/20 matching, such as now used for the regular capital grant program, would approximately pay the total operating cost of a national no fare transit program (about \$5 billion) with no substantial increase from the 1974 amount that state and local governments put into operating assistance. To cover the Federal share of an 80/20 no fare program an increase of the Formula Grant funds would be required (currently \$300 million, increasing to \$900 million by 1980) to about \$4 billion per year. A considerably lower Federal matching ratio and dollar amount would be sufficient to attract most metropolitan areas to a no fare program. As noted previously an off-peak no fare program would cost about one billion dollars per year over current operating assistance levels.

Something less than a complete national no fare program is likely to be justified by a careful cost effectiveness analysis. Off-peak free fares will affect ridership more and will benefit

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disadvantaged groups relatively more than peak period free fares. It would also encourage staggering of work hours, better utilization of equipment and a reduction of capital requirements for increased rolling stock.

Demonstrations must be carefully planned, because they will be costly and because of the complexities of the research that is needed.

Origin-destination (OD) surveys should be taken before and during the experiment. OD surveys should probably involve on-board surveys, followed by in-depth home interview surveys for relatively small sub-samples of riders. Changes in travel habits should be carefully assessed including new trips not previously made as well as all changes in trip patterns. The demonstration should last at least a year to allow habits to change; the full effects will actually take longer to be felt through decisions on auto purchases, residential location, etc.

Consideration should be given to dividing a metropolitan area up into pie-shaped wedges differing as to fare policy. The service areas might include each of the following: (a) no fare at all, (b) off-peak no fare, (c) one or more low fares, and (d) no reduction. This could be difficult for local officials to do politically and may even be difficult for UMTA to achieve.

Use Of Gasoline Taxes to Support Major New Transit Initiatives. The 50% gas tax (about 30¢ gal.) analyzed would have far greater effect on oil consumption than any other action analyzed -- about ten times as much effect as packages of ambitious pure transit incentive actions. It would have relatively little effect on transit ridership because gas price increases tend to have more effect on the long term fuel economy of autos than on short term travel behavior. Nonetheless this rather modest effect on transit ridership is fully complementary with other actions such as transit fare reductions and expansion of transit service.

The most important potential relationship between a major gasoline tax and transit, however, is not the effect on ridership but the potential it has for financing transit incentives.

A 30¢ gasoline tax would generate roughly \$12 billion/year nationally, taking into account the effects of the tax in reducing auto travel.

There has been a great deal of resistance to the application of gas taxes in this order of magnitude, based largely on the burden it would cause low and moderate income households who are dependent on automobile transportation for essential travel. This burden could be alleviated by selective tax rebates, as has been seriously proposed in draft legislation.

What may not have been widely recognized, however, is the direct substitutability of transit within metropolitan areas, particularly if transit is substantially improved.

A comprehensive legislative action might involve financing of some of the major new transit initiatives considered here from a major new gas tax that would affect only residents of metropolitan areas. To avoid the problems that would be caused by vastly differing retail prices from place to place, the tax could be applied nationwide but full (or partial) rebates of new fuel taxes could be provided to all residents of non-metropolitan areas and to all with low or moderate incomes.

A 30¢ gas tax applied to residents of metropolitan areas would generate roughly \$8 1/2 billion annually. Half of this amount, over \$4 billion, should be sufficient to finance the Federal share of a major transit incentive program of the scale analyzed. Only about 4¢ per gallon tax would be required to finance an off peak no fare program.

One simple mechanism to achieve a program of this type would be through the existing Highway Trust fund, channeling the funds added by the tax increase to the urban system program: comparatively moderate changes in the structure of the law would be required to achieve this.

Use of Parking Taxes to Encourage a Substantial Shift to Transit Where Feasible. Selectively applied parking taxes could be one of the most effective actions possible.

The specific action analyzed in this study was a parking tax of \$1.50 applied to auto commuters (long term parkers) working in those portions of metropolitan areas well served by transit.

This tax would directly affect only about 20% of all employment in metropolitan areas and less than 5% of all auto trips, yet it would have a significant effect on transit ridership -- about a 15% increase, considerably greater than the gas tax.

A disadvantage of this action taken alone is that the increase in transit ridership would be concentrated in the peak period, necessitating a 20 to 30% increase in the size of the transit fleet and comparable increases in operating costs. When coupled with a no fare program however this effect is offset, particularly if it were an off-peak no fare program.

The parking tax is very efficient from an energy conservation standpoint because more than 80% of the new transit riders would otherwise have been auto drivers. Additional fuel savings would be realized by substantial increases in car pooling -- auto occupancy for affected trips is estimated to increase from about 1.17 to 1.40.

If the application of such a parking tax was directly linked to the substantial improvement of transit in the same area, the tax would be more palatable. This is an important feature because of the resistance that parking tax plans have received in the past. A second, related feature is that the tax would not apply to short term parking in the areas taxed. Short term parking is used largely for shopping, personal business and the like. Downtown merchants, who must compete with suburban merchants, seriously oppose taxes on short term parking.

A nationally applied parking tax of the type analyzed could generate up to about 1 billion dollars annually. However, the concept of a uniform \$1.50 tax would be inappropriate in actual practice -- a lesser amount would be justified in smaller metropolitan areas.

The parking tax would be difficult if not impossible to apply directly by Congress. In addition to questions of authority and feasibility, there would be problems in defining precisely where the taxes would apply. An alternative approach would be for Congress to provide the incentive for State or local governments to implement such taxes by making Federal funds available for major transit improvements -- provided that the parking tax is levied to generate additional funds for the local match.

Major Increases in the Level of Transit Operations. Doubling of the fleet of rolling stock by 1980 is about the practical upper limit on delivery by manufacturers, allowing for needed replacements of old vehicles.

Achievement of this objective would fully provide the capacity that would be needed to accommodate the demand for transit service generated by potential severe oil shortages in the future -- more than 2 1/2 times the level that would be required under a 6 million barrel per day reduction.

It would also provide about a 50% greater expansion of the transit fleet than would be required to accommodate the ridership that would be induced by a national program to no fare transit.

Doubling of transit service would increase peak period ridership by up to 25% and off-peak by up to 50%. The peak-to-base ridership ratio would thereby increase. If this were combined with the other major actions discussed, the utilization of drivers and vehicles would be improved in the peak period with the increase in load factor being greater in the off-peak.

The total national cost of doubling transit operations (excluding inflation) would be about \$3 billion per year, \$2 billion of which was included in the cost estimate stated above for no fare transit. To clarify:

Operating cost of current national transit operations:	\$3 billion/yr.
Added cost of operations resulting from a no fare program due to increased ridership:	\$2 billion/yr.
Added cost if operations are further expanded to double current levels:	\$1 billion/yr.
TOTAL	\$6 billion/yr.

Initiatives Within the Highway Program to Give Priority to Transit. A large number of individual actions can be cited as examples of significant measures that have been taken within the framework of the highway program to encourage public transportation. On the other hand, a great many more examples

can be cited which have significant negative effects on transit and energy consumption. The negative examples include all highway improvements in metropolitan areas which provide additional capacity or speed the flow of traffic for automobiles bound for destinations well served by transit. This includes a large percentage of highway improvements in metropolitan areas. In addition there are a great many more examples of missed opportunities to assist transit and conserve energy.

The basic problem is that the highway program has generally not been re-oriented as a positive instrument of public policy to achieve today's widely accepted goals for urban transportation. The strong positive policy of encouraging the construction of the Interstate Highway System and other types of general purpose highways, in urbanized areas and elsewhere, which developed in the 1950's, has generally been modified only to the extent of permitting states and localities to re-direct this major thrust if they take contrary initiative.

Congress could achieve substantial short and long term objectives associated with the encouragement of transit and the conservation of energy if the urban highway program were positively re-oriented to the achievement of these policies. This would mean that the emphasis would have to shift from the large scale construction of general purpose highways to construction of transit facilities and to operating measures to discourage auto use and encourage transit use, including the full array of actions which have proved effective:

- bus priority lanes on existing streets;
- construction of busways;
- signalization and traffic engineering measures to give priority to transit;
- bus ramps on existing freeways;
- fringe parking;
- peak period tolls and other pricing mechanisms; and
- construction of transit shelters, stations, etc.

Strong incentives and restrictions to insure achievement of these objectives could be built into the urban highway program in much the same way as the freeway construction incentives and restrictions were developed for the highway program a generation ago.

LONG RUN CONSIDERATIONSBackground

In order to achieve long-run national energy and conservation objectives, federal policy affecting land development must be more closely tied to the provision of public transportation services. The patterns of metropolitan growth that exist today are neither conducive to transit usage nor to the reduction of energy consumption. Given the developed status of metropolitan areas, actions which could be undertaken to effect the short term appear to be minimal. However, in the long term, actions could be initiated which would shape and guide development into more positive relationships with transit and energy.

The predominant pattern of recent growth is sprawl, a distribution of single-use centers of activity dispersed at low densities in the metropolitan landscape. This is a pattern which has been encouraged by diverse, uncoordinated public sector actions. The interstate highway program, and FHA and VA mortgage programs contributed to the out-migration from central cities. The growth which occurred in fringe areas has been largely scattered at low densities. In addition, zoning practices separated different uses from each other, which has resulted in single use activity areas. Rarely have residential developments, shopping centers, campus office developments or industrial parks been combined in close proximity.

Because different activities are separated from each other, causing more and longer auto trips to be made, and because densities do not usually generate sufficient demand for transit service, the sprawl development pattern consumes a greater amount of energy for transportation purposes than any other pattern according to "The Cost of Sprawl," a report issued by the Council of Environmental Quality.

The greater vehicle miles traveled associated with sprawl results in a minimum of 19% more air pollution than other patterns. Annually, there is at least 11% more sediment from erosion and 7% greater pollutants from storm run-offs. Economically, sprawl is the most costly development pattern to construct and operate. It is most inefficient in terms of utilities, sewers, roads and other infrastructure.

Alternative Development Patterns and their Relationship to Transit and Energy

There are alternative development patterns which public policy could help foster which could overcome some of today's energy problems. For instance, "The Cost of Sprawl" examined the

travel characteristics of different community prototypes comprised of various combinations of housing types. The findings indicate that with regard to gasoline consumption related only to transportation within prototypical communities of 10,000 dwelling units, the low density sprawl pattern consumed approximately 855 barrels per day as compared with 695 barrels per day for low density clustered developments, a saving of 19% or 160 barrels daily.

Based on Census Bureau projections, if 70% of the nation's growth occurs on the fringe of metropolitan areas (as took place between 1960-1970), then by the year 2000 the suburbs will experience an increase of approximately 10 million new dwelling units.

If these 10,000 dwelling units were to be developed in low density clustered patterns rather than low density sprawl, the 25-year energy savings would amount to approximately 2,404,000 barrels of gasoline, assuming an equal number of units are built annually.

In effect, if growth could be accommodated in single family detached dwellings in clustered rather than sprawl patterns as shown below, without any other initiatives, at the end of the 25-year period the daily savings in gasoline would be 160,000 barrels per day. This energy savings would be directly attributable to reduced automobile travel. It is therefore possible to maintain the single family home, and by shaping development patterns to realize a 19% annual reduction in energy consumption. In addition, because these patterns do not account for the leapfrog impact of scatteration on a regional scale, the 19% is conservative.

In addition to this type of action to influence the pattern of residential land use, other patterns of development could be fostered. Combining residential, employment, recreational and cultural uses in close proximity, alternative development patterns could become multi-use centers which contained a range and diversity of activities and physical characteristics. These compact, multi-use activity centers would be distributed in a regional setting, and organized into a network closely related to transportation facilities.

Policy Implications

In order to achieve the long-term benefits cited above, major public policy initiatives are required which would respond to the interrelationship between development and transit.

In particular, federal actions could seek to establish strong linkages between existing community development programs and transit programs in order to effect a coordinated national urban growth management policy. This policy could provide a framework to integrate a number of programs. For example, capital grants for sewerage systems and water supply systems could be tied to the availability of transit services in communities, and to specific development patterns. The HUD New Towns program could establish requirements for transit as a prerequisite for loan eligibility. Mortgages and subsidies for community development in fringe areas could be oriented toward multiuse, clustered activity centers related to transit. The street networks and infrastructure in new communities could be an expansion of the federal aid highway program funded by the trust fund. In effect, organized and systematic policies for public investment in infrastructure within existing programs could serve as an effective lever to guide and manage growth.

FUTURE OF THE HIGHWAY PROGRAM RURAL TRANSPORTATION

MONDAY, JULY 21, 1975

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION,
Washington, D.C.

The subcommittee met at 9:30 a.m., pursuant to recess, in room 4200, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee) presiding.

Present: Senators Bentsen, Randolph, Culver, Stafford, and Domenici.

Senator CULVER [presiding]. The subcommittee will come to order.

I wonder if the witnesses would be kind enough to join us at the witness table at this time.

OPENING STATEMENT OF HON. JOHN C. CULVER, U.S. SENATOR FROM THE STATE OF IOWA

Senator CULVER. The subject of this morning's hearing is rural transportation. We shall reserve questioning of the panel until the completion of all the statements with the exception, if I might, of the initial witness, Mr. Johnson.

I want to emphasize that the format that has been adopted for these hearings is designed to encourage discussion among the panels, not just an exchange between the members and our witnesses.

The members of the subcommittee will direct questions to one or more of you, but we also want each of you to feel free to comment on the observations of each other and feel free to make comments, even when not specifically called upon.

We hope in this manner to bring out more information than is possible in a straight question-and-answer proceeding.

The first witness I would like to call on this morning is Mr. M. L. Johnson, vice president, south-central region, National Association of County Engineers. I am very pleased to welcome you here, Mr. Johnson, as a representative of the National Association of County Engineers today.

It is a particular pleasure to me because we come from the same county and the same State of Iowa. We are really neighbors, and I have known Milton for many years. He is the county engineer for Clayton County, Iowa, which is my home county.

A professional engineer, Mr. Johnson is a regional vice president of NACE, and prior to joining the Clayton County government in 1962, he was associated with the Iowa Highway Commission in Decorah, Iowa. He has a bachelor of science degree in civil engineering from Iowa State University.

I believe your experience with transportation in our own State gives you a particular expertise to comment on the major needs and some of the problems of rural transportation in America today.

I am confident you will contribute significantly to the subcommittee's consideration of this issue which, needless to say, affects the life-style of so many people.

It is a pleasure to welcome you here, as well as the other panelists. I wonder if you will proceed at this time with your statement.

STATEMENT OF MILTON L. JOHNSON, REGIONAL VICE PRESIDENT, NATIONAL ASSOCIATION OF COUNTY ENGINEERS

Mr. JOHNSON. Thank you.

Mr. Harold R. Sweet, president of NACE, asked me to represent the National Association of County Engineers, as he was unable to attend this hearing.

Our association represents some 1,200 counties in the United States and our purpose is the advancement of engineering and management by providing a forum for the exchange of ideas and information aimed at improving the county engineering profession.

In view of this, we are here today to attempt to give this subcommittee some information that will help in the formation of legislation.

The testimony which I am going to give here today, of course, was turned in, in detail, with some appendices to supplement my statement. I am just going to scan my report.

The transportation picture in rural America in changing and changing rather rapidly. The abandonment of railroads, of course, throws additional problems onto the rural road system and also the primary road system.

Any time the trains quit running, those loads have to be carried on by some other means. In Iowa, for instance, we no longer have what is termed government acres.

Therefore, all our cropland is in production. We have a considerably larger amount of grain that is being produced each and every year. This grain has to be shipped. With the loss of railroads, all of this grain is shipped by truck; some of it to the terminals on the two bordering rivers; some of it to larger rail terminals to be shipped from there by rail.

One of the things that this does, on strictly the rural road, has caused the huge truck, the semi, the 73,000-pound load, to be loaded directly at the farm and taken the considerable distance to the larger terminal.

It used to be that the small truck would haul it to either a railhead or a barge landing and be reloaded from there.

The number of loads, the size of the loads has made our problem much worse in the last several years along with the closing of the rails.

We have problems, of course, within certain city and public transit in the rural area where there is not sufficient movement to support

large buses. I think that part of this problem could be solved by using smaller buses, maybe a little bit more frequent intervals and this type of thing.

In Iowa, only 39 percent of our towns are served by innercity bus service of any sort. These buses do make a considerable number of trips with one, two, three passengers. These are the types of routes probably that should be studied in view of putting in a smaller bus.

We have one thing going in Iowa which might be unique as far as public transit is concerned. We have a bus company at Decorah that supplies a fresh bus to two workers at a factory every Monday morning.

They drive the bus to work. They get their transportation free for doing this. They haul a full load of coworkers who pay for the bus. It saves on fuel and time and it is an efficient operation as a bus company making money at this. This could be termed maybe a huge car pool. It is a working thing.

In regard to the public transportation for the poor and elderly, I would like to associate myself to some testimony presented by NAC Public Transportation Subcommittee before the Senate Subcommittee on Housing and Urban Affairs on June 18, 1975.

This testimony is attached in full, but in this particular case the county of Cape May, N.J., had a whole series of federally funded programs for transportation of the poor and elderly.

The county got all of these agencies together, bought their equipment and started providing a full service, and they are doing this at less cost and much greater efficiency than all of these scattered programs.

Our rural development is so dependent upon transportation, I think that the Appalachia case is a very glaring example of what can happen if we get good roads in a rural area, and particularly in depressed areas.

The new industries that have located down there, something like 1,149 since 1965, employing some 200,000 people, these are the types of things that can go on with the good road system.

Public transportation, fixed rail, is not practical in the extreme rural areas, whether it be for commodities or people. You have to gather this together. Even in the heyday of the railroads, nothing was loaded directly onto the rail at the farm. It still had to be transported to a railroad.

Another document which I have attached to my testimony is a statement made by Mr. Bernie Lieder,¹ from Polk County, Minn., who was president of NACE at the time he testified before this subcommittee. I just wanted to review his statement as I agree with him about the serious problem of inadequately funding of the rural transportation and the restrictions provided by the 1973 Federal Highway Act, which calls for cutting back the Federal-aid system to only major collective routes.

This took out, roughly, half of the Federal-aid system, Federal-aid secondary system, and in many counties it eliminated any possibility of spending Federal-aid money on the system as these were the routes that had been upgraded.

¹ Mr. Lieder testified at a hearing of the Subcommittee on Transportation held in Minot, N. Dak., May 24, 1975. His statement may be found in Part 1, p. 132 of these hearings.

The Federal-aid secondary moneys that would have been spent on the minor collectors is no longer available to these counties. Along with that, we developed another Federal system called off-system, with the money which was appropriated for the system.

They have come down from the Federal Highway Administration with the rules for spending this money and they are just about identical to the Federal-aid secondary system, with all the redtape and everything involved. We see this as development of a further system and that is not, I don't believe the intent of this Congress.

One of our very serious problems, of course, is our bridge problem. In Iowa alone, we have 3,400 bridges on our Federal-aid secondary system which have been posted for less than legal axle loads.

In our local system, we have 10,400, deficient bridges. The total cost of replacing these bridges is right at \$800 million for strictly the secondary system in Iowa.

The money problem has been compounded, of course, by the inflation. The way we wind up budgeting money on our local roads, we figure out a maintenance budget of what we have to have to maintain what we have got and then what is left over goes into construction.

In my own case 3 years ago we budgeted 36 percent constructions; last year, 21 percent; this year, 8 percent. If we keep going the way we are going, next year we will have no local money for construction.

It will all have to go into maintenance. As county engineers and not as elected officials responsible for allocating the taxes and the Government funds, we in NACE are not taking a specific position on the future of the trust fund.

Whatever the merit of these various proposals would be, I think that the highway system is so crucial to our Nation's economic well-being, regardless of whatever reemphasis on railroad transportation or other modes are developed, we must retain a basic semblance of a Federal aid program.

While we are developing potential alternatives to our current dependence on the highway transportation, I believe that it is imperative that we continue to fund our basic existing highway system.

We simply cannot afford to let our secondary road system further deteriorate as we are now doing.

Senator CULVER. Mr. Johnson, I want, if I could, to pursue with you a few aspects of your testimony. First is with regard to the need for adequate funding in the area of bridge repair work.

In your testimony, you touch on this problem and point out the unique problem we face in our own State concerning deteriorating bridges. Iowa received somewhere in the neighborhood of \$584,000 from the Federal Government for bridge repair and replacement in fiscal year 1975, and I think you are talking in ballpark terms about a real need now in our own State alone of in the neighborhood of \$8 million.

The proposed funding in this area is of concern to me. What do you think of the administration's proposal to remove the category for bridge repair and replacement from the Federal aid highway program?

Mr. JOHNSON. First of all, the figure is \$800 million. I am personally not in favor of categorical money. We have situations where counties have concentrated on bridges and let their roads go. Consequently

they do not have a major bridge problem. They have a major road problem. When we start giving categorical money it hurts the area or the county that was looking along that particular line.

I hesitate to say they were foresighted or backward—either one. They were looking along the lines of bridge replacement. They thought that was the most important thing.

Some of the other counties did not think that. Consequently they built their roads first and let their bridges go. When we start getting categorical moneys then the one that guessed wrong is hurt.

I would far rather see it be such as our Federal aid secondary money is right now either that or revenue sharing.

Senator CULVER. The 1973 Highway Act followed DOT's recommendation as you point out and designated that the Federal aid secondary system is one containing only major rural collector routes.

How many miles of road in Clayton County for example were affected by this decision? Do you know offhand?

Mr. JOHNSON. There would be about 183 miles I believe. It is right in that area.

Senator CULVER. 183?

Mr. JOHNSON. Yes.

Senator CULVER. Has the decision to eliminate minor rural roads from the program adversely affected the maintenance and upgrading of rural roads?

Mr. JOHNSON. It hasn't yet because the minors have not been eliminated. It won't be until next July.

Senator CULVER. How much money is needed in your county and then again in Iowa throughout the State for the maintenance and upgrading of roads? Do you have any ballpark figures?

Mr. JOHNSON. No, sir, I do not.

Senator CULVER. Perhaps you could provide those for the record for the State if you would. Do you know offhand just about Clayton County alone? For example what percentage of roads do you think are in serious need of upgrading?

Mr. JOHNSON. Percentage? Probably 30 percent are at the point of what you would call worn out.

Senator CULVER. Is that an unusual figure?

Mr. JOHNSON. I would say that it is about par for eastern Iowa. North central Iowa is a little bit better off and southern Iowa is worse off.

[Mr. Johnson's written statement and additional comments subsequently supplied follows:]

STATEMENT OF MILTON L. JOHNSON, P.E.
ENGINEER OF CLAYTON COUNTY, IOWA, REPRESENTING THE
NATIONAL ASSOCIATION OF COUNTY ENGINEERS BEFORE THE
SUBCOMMITTEE ON TRANSPORTATION, U.S. SENATE, JULY 21, 1975

Mr. Chairman,

My name is Milton L. Johnson, County Engineer of Clayton County, Iowa, and a Regional Vice President of the National Association of County Engineers (NACE). Mr. Harold R. Sweet, President of NACE, asked me to represent him since he was unable to travel to Washington, D.C. at this time. The only organization in its field--founded in 1956--NACE is an affiliated organization of the National Association of Counties, but has its own elected officers, constitution and by-laws. NACE has a three-fold objective of service to our 1,200 individual members: to advance county engineering and management by providing a forum for the exchange of ideas and information aimed at improving the county engineering profession; to foster and stimulate the growth of individual state organizations of county engineers; and to improve relations and the spirit of cooperation among county engineers and other agencies in the solution of mutual problems. We deeply appreciate this opportunity to present our views as the Subcommittee considers the very significant problems of rural transportation facing this nation in the next quarter century.

THE CHANGING NATURE OF TRANSPORTATION

As you all know, the transportation picture in rural America has been gradually changing for many years. There are a few developments, however, which cause an immediate serious impact on one mode or another of transportation. One of these is the abandonment of railroads. Abandonment has an immediate and significant impact on the road system in the area which loses the rail service. On the surface, it appears that the rail lines that have been closed are

spur lines carrying a relatively light traffic load. However, in many cases, if the branch line is not there to feed the main line, the main line traffic also drops off because once the commodities are loaded on a truck the tendency is for that truck to haul it to its destination, even though it is a relatively long distance. This increases the load on the entire road system from the farm all the way to the ultimate destination.

Beginning with semi-trucks loaded right at the farm, 73,000 pound loads are being pulled over all types of granular surface roads, over all of the bridges on strictly rural local systems, from there to the primary system, and on to the Interstate or to the market place.

In addition to changes resulting from rail abandonment, changes in the nature of American farming are also impacting the nature of our rural transportation problems. Production per acre is up and the amount of commodities being shipped to market is considerably increased. For example, in the dairy industry, at one time the bulk of milk was separated and fed to the livestock on the farm and only the cream was hauled to town. Now the entire product is hauled --- instead of having 5 percent of the weight, 100 percent of it is hauled daily to the marketing or manufacturing plant. All of this agricultural progress has increased the weight that is carried over rural roads by a far greater amount than the increase in number of vehicles would indicate.

THE PROBLEMS OF RURAL PUBLIC TRANSIT AND INTERCITY BUS SERVICE

In most rural areas, there is no public transportation. Yet, the need is great and growing greater. Since the population is widely dispersed, most trips in rural areas are long distance trips. The rising cost of gasoline makes provision of some sort of public transportation for rural areas more imperative than ever.

Such public transportation facilities as do exist in rural areas are severely limited in their ability to meet the real needs of rural residents. Either they are intercity private systems, with fixed routes and schedules that cannot be adjusted to local needs -- or they are fragmented programs, supported by federal categorical grants and designed to meet the special needs of relatively small numbers of specific people.

I believe that intercity bus service needs to be re-thought and alternative types of service developed. In Iowa, 39 percent of towns are served by intercity bus service. However, many of these buses make numerous trips with only one or two passengers, which is obviously very costly both financially and energy-wise.

I would suggest two possible alternatives. One is the use of station wagons and vans for intercity service instead of costly, inefficient full-size passenger buses. Another possibility is already being operated by the Scenic Hawkeye Stages bus company which provides a freshly maintained bus each week to two factory workers who are employed as part-time drivers for their co-workers, with no dead-heading. The worker-drivers get free transportation to work; their co-workers pay for their ride, which is cheaper than driving; the full bus load provides efficient service; and the bus company is realizing a reasonable profit.

In regard to public transportation for the poor and elderly, I would like to associate myself with testimony presented by NACo Public Transportation Subcommittee Chairman Ralph G. Caso before the Senate Subcommittee on Housing and Urban Affairs on June 18, 1975. He cited one solution to rural public transportation being developed in rural Cape May County, New Jersey. I quote from his testimony:

"I think that it is poor public policy to encourage the continuation or proliferation of these fragmented, categorical and very costly programs. Instead, we should allow public transportation agencies more flexibility to develop unified transportation services. Giving these agencies the authority to use UMTA funds for operating expenses, instead of limiting them to capital expenditures, will go a long way towards encouraging more imaginative approaches to public transportation planning, such as the program already underway in Cape May County in New Jersey. Cape May county is one of the least populated, most rural counties, in that state. Its largest town has only 8,000 people. The county traffic department is now coordinating one bus system to serve the needs of people who were previously served by 30 independently-operated transportation programs which were funded by various health and social services projects. Each project, instead of operating its own program, now pays the county for providing transportation for its clients. Actual service has expanded significantly -- and the ultimate goal is to extend the service to the general public as well."

In counties like Cape May, where there are already vehicles available, the prime need is for coordinating the many available programs and running the kind of unified public transportation service system that is now being developed there.

Another example of duplicated services due to more than one agency being involved is in my own county of Clayton, Iowa, where the federal government is paying a person to sit on the phone four afternoons a week to receive telephone calls from the elderly who in turn are picked up and transported to the hairdressers, grocery store or whatever on two afternoons a week by volunteer drivers furnishing their own transportation. Just down the hall from this telephone

operator is another one who is also funded by a federal agency to answer the phone in regards to anyone needing the services of the homemaker service. This duplication of these types of services is a good example for the need for coordination of the many, many federal programs.

RELATIONSHIP OF TRANSPORTATION TO RURAL ECONOMIC DEVELOPMENT

In regard to the considerable economic impact of transportation in rural areas, I would refer the Subcommittee to evidence documented as a result of experience of the Appalachian Regional Commission. As the members of this Subcommittee are aware, ARC has a system of development highways interconnecting with the Interstate System. A study completed two or three years ago indicated that more than three fifths of all new industrial locations were within twenty minutes of a new highway and almost one half were within ten minutes of a new highway. Even before many major sections of the Appalachian corridors were open to traffic, 1149 new plants had located near these highways since 1965. Total new employment at these plants was estimated to be 200,000 workers.

In our own area in Iowa we have had several industries located strictly because of highway transportation being available. The latest one in northeast Iowa for instance, is a Sara Lee plant at New Hampton. There, prime consideration was a good highway system; second consideration was the labor force in the area. Many other examples, including industrial development around interchanges on the Interstate system and the addition or expansion of industries along any good highway, point to the vital impact of good access to transportation on rural development. ~

RURAL HIGHWAY PROBLEMS

Although we are vitally concerned with rail and personal transit problems, we believe that even if we are to meet our rural needs for improvements in these modes, the primary need in rural areas is for highways. Even if the ideal rail freight system were developed to carry rural farm products, this service is never again likely to carry less than carload shipments---even in the heyday of the railroad, there was not a single shipment loaded directly onto the rail car at the farm. Transport from farm to rail yard will most likely continue to be provided by truck, traveling on public roads. And no matter how well we might develop rural public transportation systems, our dispersed rural population will continue to depend on the automobile for personal transportation to work, shopping, and essential services. That public transportation which will develop in rural areas will generally be motor vehicle transit over the roadbeds of our public highways.

Assuming the prime importance of our rural road system, I want to make clear that we are not referring to any major new construction---basic rural roads are in place. We are talking about upgrading and reconstruction of vital systems of public

In this regard, there are three primary problems which I shall address briefly. Two of these are discussed by Bernard Lieder, County Engineer of Polk County, Minnesota, and then-President of NACE, who testified before this Subcommittee in its hearings in Minot, North Dakota, on May 24, 1975.

I am attaching Mr. Lieder's statement as a means to document:

- (1) the serious problems impacting the adequacy of future

- 7 -

rural transportation as a result of the restriction provided in the 1973 Highway Act which calls for cutting back the Federal aid secondary system to only "major" collector routes; and

(2) the illogical development called the "Off-System" program with its level of funding so inadequate and degree of red tape so great that it only further fragments an already over-categorized Federal aid program.

I am also submitting a copy of resolutions dealing with these two problems adopted by the National Association of Counties on June 25, 1975, both of which were initiated by NACE. We were also joined in the resolution on Off-System Roads by the American Association of State Highway and Transportation Officials.

Another issue addressed in Mr. Leider's statement is the oft-repeated problem of the terrible state of disrepair of this nation's highway bridges.¹ In addition to the figures cited from Minnesota, I point to result of my neighboring state of Indiana's County Bridge Inspection Program. That survey identified 9,585 bridges unsafe for legal axle weights. More than 6,500 bridges were found to be unsafe for standard-size school buses. Estimated cost for essential repair or reconstruction is \$115.6 million.

In my own state of Iowa, we have 3,400 bridges on our Federal aid secondary system which have to be posted for less than legal axle loads---replacement cost estimates exceed \$250 million. In addition, we have posted 10,400 bridges on local road systems for less than legal loads---replacement of these is estimated at over \$546 million.

¹/ Mr. Leider's statement, part of the proceedings of the hearing held at Minot, N. Dak., may be found at p. ____ of this document.

FUNDING PROBLEMS AND NEEDS

It is easy to note the wide disparity between estimated costs and funds available to deal with our bridge problems. These same problems affect every aspect of rural transportation. I would hesitate to join those who are guessing at the possible costs of revitalizing our critically sick rail industry, though the need for some form of public subsidy is clear. Development of rural public transportation to conserve energy and improve accessibility of the rural poor and elderly to needed services is a costly matter.

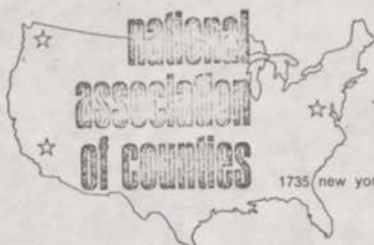
At the same time, the impact of inflation is critically affecting our primary mode of rural transportation---our public roads. And this problem is a double-edged sword. Construction costs are soaring while simply maintaining the existing system is eating away at our basic fiscal resources.

It is mandatory to maintain existing roads at a minimal level; therefore, the first amount of local money that is budgeted goes into basic maintenance of the present system. What remains goes into construction or reconstruction. In my own case, three years ago we budgeted 36% of our county roads budget for construction---last year 21%---this year only 8%, because of inflation in maintenance costs. The only source of funds for this maintenance was from the construction budget.

We do believe that maintenance of the local system is a local and state problem and should not have to be dealt with by the federal government. However, the federal gas tax that is presently being collected, I believe, needs to be continued to be returned to the highway system.

There have been many proposals about changing the system--- all the way from directing part of highway user revenues into the general fund of the federal government to part of it going back to state governments, usually with at least enough left in the Trust Fund to complete the Interstates.

As County Engineers, not finance experts or elected officials responsible for allocating tax and intergovernmental funds, we in NACE have not taken a specific position on the future of the Highway Trust Fund. Whatever the merit of these various proposals may be, however, I think that the highway system is so crucial to our nation's economic well-being, regardless of whatever reemphasis on railroad transportation or other modes is developed, we must retain a basic semblance of a Federal aid highway program. While we are developing potential alternatives to our current dependence on highway transportation, I believe it is imperative that we continue to fund our basic existing highway system. We simply cannot afford to let our secondary road system further deteriorate, as we are now doing.



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RESOLUTION

ADOPTED BY NACo AND TO BE FORWARDED TO THE SECRETARY OF TRANSPORTATION WITH A REQUEST FOR ACTION

To be consistent with the intent of Congress to reduce red tape and recognizing the inflationary impact on local jurisdictions responsible for management of off-system roads, making it difficult, if not impossible, to provide matching funds normally associated with Federal-aid highway programs, NACo urges the Secretary to utilize the discretionary authority established by Section 122, Federal Aid Highway Amendment of 1974, to make off-highway system funds available to the states for distribution on a fair and equitable basis to appropriate jurisdictions as grants, in the true sense of the word, without requirement for matching. It is also requested that regulations enacted by DOT governing the use of off-system funds permit maximum practical flexibility as to required design standards and compliance with procedures and regulations pertaining to the use of other classes of Federal-aid funds.

adopted June 25, 1975, Honolulu, Hawaii



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RESOLUTION

COLLECTOR ROADS

WHEREAS, the 1973 Federal Highway Act provides in Sec. 148(b) (2) that "after June 30, 1976, the Federal-aid secondary system shall consist of rural major collector routes," and

WHEREAS, restricting the use of FAS funds to only the more important routes will: (1) exclude some counties from FAS funding entirely; (2) will severely handicap the flexibility of administration in programming projects; and (3) will concentrate funding on those routes where the highest priority has previously been concentrated and, thereby, by-pass construction on the lesser routes; and (4) reverse the past influence for better standards and engineering; and (5) place the secondary system on a higher functional classification basis than the urban system; and (6) will tend to promote even more categorical programs of narrow usage; and

WHEREAS, the reduction of the FAS system to nearly one-third of its present size will apparently contravene the intent of Congress to concurrently upgrade both the Urban and Rural local systems.

BE IT HEREBY RESOLVED, that the Congress be respectfully requested to strike the word major from the language in Subsection 103(2) (2) of the 1973 Highway Act, and that a copy of this resolution be sent to the Secretary of Transportation and each State Highway and Transportation Department.

adopted on June, 25, 1975, Honolulu, Hawaii

ADDITIONAL COMMENTS OF MILTON L. JOHNSON, P.E.
REGIONAL VICE PRESIDENT, NATIONAL ASSOCIATION OF
COUNTY ENGINEERS FOR THE SUB-COMMITTEE ON TRANS-
PORTATION, COMMITTEE ON PUBLIC WORKS, U.S. SENATE,
JULY 21, 1975

In the course of the hearing, Senator Culver asked about the maintenance and reconstruction costs of the roads in Iowa. Attached is a short table showing the figures from the latest needs study which was conducted in 1971 and updated in 1973 and the dollars updated again in 1974. Details show the mileage, construction needs, maintenance needs, administration needs and total annual needs for the four jurisdictions, that is state, counties, cities and state park and institutional roads.

I would like to further comment on Mr. Coupal's remark concerning the administrations setting of priorities.

Mr. Coupal stated that the administration bill reflects a concern for the roads and streets of the nation as well as the economic situation. I believe that the testimony that was given in regard to the Apalachia area and what it has done for the economy there points out very dramatically the fact that we have to keep our road system readily usable or we are going to suffer economically for the lack of good rural transportation. I would also like to re-emphasize that without a fairly certain assured funding, economic planning cannot be done in an industry such as the road construction industry where it takes from three to ten years

from the inception of a project until it is built. Placing half of the federally collected fuel tax into the general fund certainly is not going to give us that assurance and is not going to help the money shortage.

As long as there is such a desperate need for more money for roads I don't believe that the solution to the needs of the other transportation modes or the other areas of the economy should be attempted to be solved by creating an even greater shortage of money for the highways.

Mr. Coupal knows from his experience in Iowa what happens when money does not come at a predictable rate. Several years ago, due to some released funds, Iowa had more money than they were prepared to spend for roads. Therefore, an apparent surplus existed for a short time and the State Legislature looked at the amount of money which they thought was a surplus in the road fund and diverted the money that would normally have gone into the road use tax fund to some general fund expenditures. The following year when plans were available and projects were ready to be let, the money was not there. This is a result of a yoyo effect of large increases or decreases from year to year in funding. I re-emphasize that we need a on-going program with some assurance of the amount of money that will be available so that construction can be done on a relatively uniform basis which will result in economy as well as a better highway transportation system.

ANNUAL-NEEDS IOWA 1973-1992 NEEDS STUDY
 UPDATED TO 1974 PRICES IN \$1,000

JURISDICTION	MILEAGE IN SYSTEM	CONSTRUCTION NEEDS	MAINTENANCE NEEDS	ADMINISTRATIVE NEEDS	TOTAL NEEDS
State	9,526	\$354,774	\$43,200	\$37,006	\$ 434,980
Counties	90,408	251,679	91,699	10,021	353,399
Municipalities	12,656	160,116	46,863	7,939	214,918
State Parks & Institutions	271	2,825	307	261	3,393
TOTAL	112,861	\$769,394	\$182,069	\$55,227	\$1,006,690

Senator CULVER. Thank you.

Senator STAFFORD [presiding]. Thank you, Senator Culver. The Chair's intention now is to go on with the balance of the panelists who have prepared speeches or are expected to make a statement.

The Chair was a little late in getting here because of a meeting at the White House. We understand that the members of the panel have been requested to confine their statements to 15 minutes. If the written statements are longer than that, they will be included in the record in full. But the committee would appreciate it if the statements could be limited to about 15-minute oral presentations.

We are going to invite the three panelists who we understand are prepared to talk to us to go ahead and then we will ask the other contributing members of the panel to join with you in a general discussion.

At this point, the Chair will invite Mr. Charles Webb, president, National Association of Motor Bus Owners, to be the first of the succeeding three speakers.

Mr. Webb.

STATEMENT OF CHARLES WEBB, PRESIDENT, NATIONAL ASSOCIATION OF MOTOR BUS OWNERS

Mr. WEBB. Yes, Mr. Chairman, members of the subcommittee. I am here on behalf of the National Association of Motor Bus Owners to present our views on the future of the highway program and in particular on transportation problems of rural America.

We have about 450 operator members and they provide bus passenger service to about 15,000 communities and 14,000 of those have no other common carrier passenger service.

Last year the Congress authorized the expenditure of approximately \$2 billion a year for the improvement of urban mass transportation. This Congress has approved subsidies of \$1.1 billion for Amtrak, which serves mainly major cities.

We believe the time has now come to launch a major effort for the improvement of public transportation for the residents of rural and small urban areas. We think our industry can play a vital role in any such program.

Section 4(c) of the Urban Mass Transportation Act of 1964 provides that not to exceed \$500 million shall be available exclusively for assistance in areas other than urbanized areas, but goes on to provide that such funds shall not be available for the payment of operating subsidies.

It is not entirely clear to me at least whether the Congress intended these funds to be used for the improvement of purely local transportation within rural and small urban areas or whether the Congress also intended to improve public passenger transportation between such areas and the urbanized areas.

Intercity bus transportation between rural and small urban areas on the one hand and urbanized areas on the other cannot be improved significantly by capital grants alone. Our members are able to acquire the facilities necessary for adequate bus transportation, but our members cannot be expected to maintain, extend, or improve service which must be conducted at a loss.

A program to improve mass transportation for the residents of rural and small urban areas involves three types of bus transportation. First, we have the transportation which is wholly within rural areas. Then there is transportation wholly within the small urban areas which have a population of between 5,000 and 50,000.

We have no particular interest in those two types of rural and small urban transportation. We believe the most important type of transportation for persons who reside in isolated communities is the service that can be provided by intercity buses.

Those who reside in rural areas and in small urban areas should have convenient public transportation to insure access to employment opportunities, health care institutions, shopping centers, educational facilities, cultural activities, and the other services and attractions which are normally concentrated in urbanized areas.

That is the type of service provided by intercity bus operators.

I have already mentioned that our members provide the only public passenger service to 14,000 communities. Still the quantity of service provided by intercity bus operators and particularly the smaller operators has been curtailed over the years.

The number of passenger carriers regulated by the ICC has declined from about 1,600 in 1950 to 1,130 in the mid-1960's down to 980 today. Traffic volume has decreased markedly, particularly on regularly scheduled routes.

These service cutbacks have been concentrated on the routes serving sparsely settled areas and communities which are not located on the Interstate Highway System.

Over the past 20 years, many routes have been abandoned and over many other routes the number of schedules has been reduced.

In addition, service is now being performed over many routes at a loss and in time operators will find it necessary to discontinue that uneconomical service.

So, Mr. Chairman, our association offers for the subcommittee's consideration a proposed title V for the Federal Aid Highway Act of 1975, which is set forth in the appendix to my statement. I am not going to read that amendment, but I would like to summarize it and to answer any questions you may have.

If the Congress concludes it is desirable to improve and to extend intercity bus transportation for the benefit of residents of rural and small urban areas, it should recognize that the laws and procedures which have been designed for urban mass transportation simply will not work.

For example, it would not be feasible to require a dozen or so communities proposed to be served by an intercity bus route to engage in comprehensive transportation planning or to require that hearings be held in each such community.

Because intercity bus transportation unlike urban mass transportation is not localized, a requirement that applications be initiated by the local public bodies of the communities proposed to be served would be impractical.

Therefore, in the amendments we have suggested applications for assistance could be initiated by intercity bus operators and filed with the State regulatory commission or other State agencies responsible for regulating the rights and services of motor carriers.

The State regulatory commissions, in most cases, are already responsible for determining whether bus passenger service should be initiated, curtailed or discontinued.

Our members are convinced they can provide intercity bus transportation to residents of rural and small urban areas much more economically and much more efficiently than any public agency, the employees of which are likely to have very limited transportation experience.

Thus, in our proposed amendments, we have provided that a preference in performing a subsidized rural transportation service be accorded to those private bus operators who have provided public passenger transportation over the routes or within the general area of the assisted project.

Under the amendments, we have submitted operating subsidies for the continuation, extension or improvement of intercity bus transportation would be provided in the following manner.

An intercity bus operator who could no longer provide service to rural and small urban communities except at a loss would apply to the State regulatory commission either for authority to discontinue the service or to continue it with Federal operating assistance.

If the State regulatory commission found that the service in question was required by the public convenience and necessity, it would forward the application to the Department of Transportation, recommending that the service be continued under a contract with the appropriate State agency.

Under such a contract, the intercity bus operator might undertake to perform the service found to be necessary at \$1 per bus mile and to return all passenger and express revenues derived from the operation to the contracting agency.

Under such contractual arrangements, a vast amount of existing service now threatened with abandonment and a vast amount of new intercity bus service could be provided at modest cost and perhaps for as little as 10 or 20 cents per bus mile.

Under the program we have proposed, we believe intercity bus transportation could be provided to residents of rural and small urban areas for as little as 2 or 3 cents per passenger mile. My comparison, on many of Amtrak's routes outside of the Northeast corridor, the subsidy on a per passenger mile basis, runs as high as 10 or 15 cents.

We do not suggest that Federal operating assistance be provided out of the highway trust fund. If in the basic concept of the fund is retained, as we believe it should be, the rural transportation program we recommend would be financed from general funds already committed by the provisions of section 4(c) of the Urban Mass Transportation Act.

The Federal Aid Highway Acts of 1973 and 1974 provide for rural highway public transportation demonstration programs but the guidelines for these programs were not issued until April 11, 1975.

One great weakness in that legislation is its failure to authorize operating assistance for existing service which is unprofitable and which sooner or later must be discontinued.

In the legislation we have proposed, no provision has been made for State matching, because only a few States now have programs for assisting intercity bus transportation in rural and small urban areas.

State matching should be required, in our opinion, following a 4-year demonstration period.

If the committee is receptive to the general purpose of the amendments we have proposed, I will be happy to work with the committee and its staff in perfecting the language in question.

In conclusion, I again want to thank the subcommittee for the privilege of appearing here today and presenting the views of the inter-city bus industry on this important matter.

Thank you.

Senator STAFFORD. Thank you very much, Mr. Webb. It is a very helpful statement.

The Chair will now invite Dr. Saltzman to give us the benefit of his testimony.

STATEMENT OF ARTHUR SALTZMAN, DIRECTOR, TRANSPORTATION INSTITUTE, NORTH CAROLINA A. & T. UNIVERSITY

Mr. SALTZMAN. My name is Arthur Saltzman and I am the director of the transportation institute at North Carolina A. & T. State University which is located in Greensboro, N.C.

We have been associated with rural transportation for a number of years as a result of some research projects that we have been doing for the Department of Transportation. I am delighted to be invited as a witness. I believe much of our work can be very useful in the formulation of national policy.

This research has allowed us to see firsthand the importance of providing rural public transportation services and, as a result of the many field trips that I myself have made, I am convinced that people who do not have access to automobiles in the rural areas are more transportation disadvantaged than persons in urban areas who are similarly without automobiles.

Rural people who cannot afford an automobile, elderly persons who are not able to drive, are quite isolated and without access to employment, shopping, and social services. Our research projects are funded by the Research and Education Division of the Urban Mass Transportation Administration and the Department of Transportation's Office of University Research.

Having introduced some of these sources of the testimony, let me proceed to summarize some of the results of our research and make some suggestions as to how to provide better public transportation in rural areas.

There are a number of subject areas, each of which are listed in our testimony. I will proceed with them in order. First I think it will be a mistake if we try to apply urban technology in the rural areas in the public transportation arena.

The level of service needed to meet the needs of the rural areas is not nearly as high as in the urban areas. What is needed are specialized systems that provide demand-responsive transportation on a weekly or daily basis.

The theme of providing personalized transportation services to rural transit users is one that is especially important to serving the elderly and the handicapped. Transportation planners in general in the rural areas have to become more sensitive to the individual needs and trip making desires of persons who need public transportation.

The second item I would like to address is how we go about interpreting cost data. Certainly cost is one of the main items we look at in any public transportation proposal. In our own analysis of 12 existing systems that were providing rural transportation, we found per passenger trip round costs that averaged from \$3.86 to \$10.51 with an average cost of \$6.71 for a round trip; quite high unless you start analyzing what that all means.

These were in fact very reasonable costs given the distances that had to be covered. Consider that the average round trip was 97 miles. In addition, we found fairly efficient utilization of the vehicles. Something like 65 percent load factors were being achieved in these rural systems, whereas in most urban areas, the average load factors are well below 50 percent. These high load factors allowed the cost per passenger mile to average 6.9 cents which compares quite well with urban systems.

I think that goes back to the previous point that I made that demand-responsive transportation which takes into account the individual needs of the transportation disadvantaged will allow them much better services in addition to fairly efficient services.

Our research in general has indicated that among the systems we visited, important mobility needs were being satisfied in a very cost-effective manner even though the per passenger trip costs were high.

The next item I would like to comment on concerns the consolidation of resources. I have spent a lot of time talking to the planners in rural areas and listening to their problems. One of the things that comes through loud and clear, and very often is the need for consolidating the large number of existing funding sources that currently allow them to provide transportation services.

Suanne Brooks, who is on the Expanded Metro Mobility Task Force in region IV, counted up well over 30 separate sources of public transportation funds that were being used by various public transportation facilities in rural areas.

Senator DOMENICI. How many?

Mr. SALTZMAN. At least 30. That was a first count. In her revised statement, it is going to be well over 50. I am suggesting to this subcommittee that an interagency group be formed such as the task force that I referenced in region IV, this interagency group should be commissioned to review the funding legislation and the regulations that exist both at the Federal and State level and then come back to this committee to make recommendations as to how to eliminate the duplications and inefficiencies apparent in a large number of inflexible funding sources.

There are some local people out there who are doing a good job of consolidating sources. There are a number of very efficient operations who have combined a number of sources from the Department of Health, Education and Welfare, from the Department of Transportation and the Department of Labor. They have taken local, State, and Federal resources and put them together into a coordinated specialized transit service. Let me describe one such effort in Delaware.

The Delaware Authority for Specialized Transportation (DAST) was created by the legislature specifically to provide an agency that could consolidate these resources. In almost every case that we looked at in Delaware, the cost to the agency that was then buying transportation services from DAST was lower than if they had been trying to provide it themselves.

Local efforts of coordination are also important. During our visits to the sites that were conducting rural systems, we found some that were very successful in providing transportation services to more than just one agency.

Typically, the systems we looked at were started from a grant from OEO and used to provide client services for people visiting the Community Action Agencies. A number of enterprising Community Action Agency managers were going out and finding a way of getting purchase of service contracts from other agencies.

Mr. Johnson's reference to Cape May County was very poignant because John Salvesen the manager of Cape May County has now gone beyond just one county that he has consolidated and has 8 to 12 counties in the southern New Jersey area coming together to form a consolidated service. It is fairly clear it will provide a much higher level of service to the elderly at a reasonable cost.

I think that it is also interesting to note that the manager is a traffic safety engineer who decided he wanted to do something for the local people who had severe mobility problems. He is a good example of skilled managers and planners, which leads to my next comment.

When we went out and looked at these various systems, we began to realize how important the manager was. Let me just summarize my entire written statement on this topic by saying what we found is if you had a good manager, it was very likely you had a good system, someone able to sell the system to the local politicians, to the county commissioners and to go out and find ways of bringing in income to support a high level of services.

I would like to suggest that we have to revise the training that we are giving our urban transportation specialists and make available other academic options. This is one of the things we are trying to do, at my university; to train people who are much more sensitive to the individual's transportation needs and to train people who are able to consolidate and find ways of bringing together resources.

We have to find ways of paying competitive salaries to the directors of these systems. A competent manager would hardly be enticed by the \$6,000 to \$10,000 a year being offered by most rural transit operators.

The vehicle problem is one that I am also concerned about. There is not, to my knowledge, a vehicle that is adequate to serving the elderly and handicapped in either rural or urban areas. UMTA has some research underway to design one. I hope they will receive increased amounts of funding to complete this research.

I am concerned that people seem to be promoting the utilization of schoolbuses for the elderly and handicapped and want to make them available to rural areas for serving the disadvantaged. I think this is a mistake. Schoolbuses provide very poor service in terms of comfort and are not very much less expensive to operate than the smaller vans that are currently being used.

That concludes the section on specific subject areas. I have a couple of comments on some pending legislation. Specifically, the sections of Senate bill 662 which relate to operating assistance to areas other than urbanized areas.

One, restriction in the National Mass Transportation Assistance Act of 1974 is illogical and arbitrary. This is legislation that requires that the \$500 million which is available to places of under 50,000

population may not be used for anything except the purchase of capital equipment.

I was pleased to note that Senator Williams' bill, 662, will make 50 percent of these funds available for operating expenses. I suggest that not only 50 percent, but at the discretion of the locality, up to 100 percent of these funds should be available for operating assistance in nonurbanized areas.

I fail to see why a cut has been made at areas of 50,000. There is nothing logical about this cutoff. In fact, our research indicates that it is the smaller urban and rural areas that need more flexibility in funding than the larger urban areas. These smaller transit systems tend to be much less capital intensive. I hate to see an awful lot of little buses running around rural areas that would very quickly go out of existence because of the lack of operating funds to keep them going.

I have one other comment on the administration's proposed highway bill. I think their proposal to allow more flexibility in the use of funds in rural areas for public transportation as well as highways is a good one. I think we need the flexibility for local decisionmakers to decide where their priorities lie.

I would also like to comment on the proposed revision to the rural highway public transportation program which is the section 147 to which Mr. Webb referred. The revision would take all the appropriated funds from the general fund, eliminating the need for taking any money from the highway trust fund for this section.

This means that all the funds could be used for operating assistance in the demonstration program. Under the current legislation, only the one-third of the funds that were coming from the general funds were available for operating assistance. The rest of the money which came from the highway trust fund had to be used for capital equipment.

I think, in addition, we need more money appropriated for this demonstration program. It is going to be very important to rural public transportation. I would like to also emphasize this is really only a demonstration program. We shouldn't try to do anything other than demonstrate how to provide public transportation more efficiently in a rural area.

As a result of our research under contract with the Department of Transportation, we will be producing a handbook on rural public transportation that will instruct managers and planners who want to design a system and how to go about implementing it. We are also pleased that our research will be used in the state-of-the-art document on rural transportation that is being prepared by the technology sharing program of the Department of Transportation. We have coordinated our efforts with the Department of Transportation, so that these two documents will be complimentary. I expect they will be available by January.

Finally, we are participating in a National Conference on Rural Public Transportation that will be held in North Carolina A. & T. University during the spring of 1976. We welcome the participation of members of the committee.

Thank you for giving me this opportunity to put my testimony on the record. It is my pleasure to put some of our research findings into the hands of the decisionmakers.

Senator STAFFORD. Thank you, very much, for your statement and for the invitation to come to North Carolina A. & T. next spring.

The Chair will now invite Dr. Harold Michael, the final speaking panelist, to proceed with his testimony.

Senator DOMENICI. Mr. Chairman, might I ask Dr. Saltzman a question?

In your work as a consultant, did you look into programs that were not basically funded or handled through DOT, but that were providing some kind of transportation to rural areas, although perhaps not exclusively under a specific legislative mandate, where transportation for the aging, the handicapped, and some of the poverty programs was involved?

Mr. SALTZMAN. In fact, yes. Almost every one of the systems that we visited, there were 12 that we did indepth studies of, were started as a result of grants from the Office of Economic Opportunity. They were social service agencies that, in many cases, simply perceived the need for transportation for their clients and tried to find a better way to link the service providers with the users.

They started what were called demonstration programs under the OEO guidelines. What has happened in many of these cases is that these transportation demonstration programs ran out of funds and stopped operating. But many of the more competent managers have found ways of securing many agencies funds that were available for transportation, and put these funds together in a very efficient manner.

There were very few Department of Transportation funds in any of these systems. I am therefore glad to see the Department of Transportation getting involved in rural public transportation. In the National Mass Transportation Act we have a \$500 million allocation for nonurbanized areas. I think it is very important that we continue the thrust of consolidating these sources.

There are some working arrangements between the various agencies that are very much needed. That would allow them to get the consolidation accomplished. The task force idea would be a reasonable one to try to identify the funding sources, and how they might be put together efficiently.

Senator DOMENICI. I appreciate your approach which basically, if I understand it, is saying if we had better managers we might be able to pool together the programs and do a better job. I am wondering if your study or the Brooks study is going to recommend to the committee a way of legislatively making it easier for the consolidation to occur?

Mr. SALTZMAN. I think the first and easiest way would be to take off some of the fairly arbitrary restrictions on the utilization of funds. I think the clout has to come from the Federal Government. But there are obviously a number of State laws on the books that are restrictive and do not allow for consolidation and for efficiency.

Again, if we could get some Federal interagency task force started that would investigate these problems—I am not sure that is the best way, but somehow the knowledge has to start flowing that there are problems with the consolidation effort and somebody to oversee this. Perhaps the Departments of Transportation, Health, Education, and Welfare, HUD, and a number of the other agencies could get together and start to find ways to relax their restrictions.

There are some examples of how this is happening in some local demonstrations. In the lower Naugatuck Valley of Connecticut, the Department of Transportation and the Department of Health, Education, and Welfare are working very closely together to provide transportation. The Department of Transportation provides the basic funding and through a special fare-sharing system they allow the Department of Health, Education, and Welfare to pick up the cost of providing transportation for some of their clients. I think this is a very good start. We should look to this demonstration program to see if it is applicable to other areas. There are only two agencies getting together in a very small urbanized area but the system is innovative and very well managed.

Senator DOMENICI. I take it as you found these arbitrary limitations in transportation, you found them in many other areas of endeavor. You found the building could not be used for anything else but Head Start, if Head Start would not rent it. You found it was very hard for somebody to want to provide transportation to Head Start to do it in a proper way because its funding is precarious so they don't know if they have a contract.

Mr. SALTZMAN. Yes.

Senator DOMENICI. Is rural transportation, including the programs you were speaking of, in your opinion one that could be conducted under a transportation umbrella as such and then fit the other programs into it rather than the way we are doing it? I don't know that we could do it with buildings and services because we don't know what is going to happen to all of those programs.

But it appears to me desirable since the need for rural transportation is so big that you could include all those others in rural transportation and provide for the interchanging of funding. It seems to me that rural transportation is big enough and growing and flexible enough that you wouldn't be wasting effort if you had one thrust that included all the others.

Mr. SALTZMAN. In fact, in Delaware they have done that. The legislature set up an organization that was specifically empowered to provide services to the various agencies that had previously been providing it for themselves. I think that is a different enough situation that it may not be applicable to every area.

But if the States would start forming regional transit authorities as they have done, for example, in the State of South Carolina, it would facilitate things. We need some more legislation in the various States to allow them to establish regional transit authority which then can provide the basis for providing transportation services whether or not Head Start is there. There will be services for them and other local agencies.

I would like in a side note to suggest that similar things could be accomplished in urban areas.

Senator DOMENICI. On the rural area, for a minute, you are saying States ought to do this, that Delaware's pilot one, as you see it works. Do you find anything in the present Transportation Act that is stimulative of the States doing that? I am saying I don't. I am wondering if you do.

Mr. SALTZMAN. Let me at least suggest that in the program of the administration, that is being proposed as the next Federal Highway Act, I find some flexibility in the rural areas that would allow highway money to be used for public transportation. I think this is a beginning.

I am a little concerned when I read that they are changing the definition of what is urban so it might go down from 50,000 to 5,000. I think that is the correct interpretation of what has been suggested. That will then require the smaller urban areas between 5,000 to 50,000 population as Mr. Webb was suggesting, to have hearings, provide various transportation studies and do much more planning than they are currently capable of doing.

I, frankly, find little within the National Mass Transportation Assistance Act that would really force the rural areas to have coordinated transportation. In the urbanized areas, there are certain planning requirements. In the rural areas, we have very little planning requirements. I think we need them; but we don't want to force them down the throats of the rural areas because that would stop many of them from applying for transit funds.

Senator DOMENICI. Thank you, Mr. Chairman.

Senator STAFFORD. Thank you, Senator Domenici.

Mr. Michael, if you are ready, the subcommittee is ready also.

STATEMENT OF DR. HAROLD MICHAEL, PRESIDENT, INTERNATIONAL INSTITUTE OF TRAFFIC ENGINEERS

Dr. MICHAEL. Thank you, Mr. Chairman, and members of the committee.

My purpose today is to present to you some of the information that we have collected as far as our research at Purdue University is concerned for the counties in Indiana. I will be speaking for the Indiana Highways for Survival, an Indiana organization for adequate development and maintenance of our highway system and also for the Institute of Traffic Engineers, which is the technical society for the 5,000 professionals in that particular area.

I certainly appreciate this opportunity to discuss rural transportation. Some might expect me, being a traffic engineer, to also speak as far as urban transportation is concerned. I would be glad to, but today we will talk about rural transportation.

As we all know, in the past several years, emphasis has been on the urban transportation problems and I certainly admit there is good reason for this. There are still problems in transporting people and goods in our cities; but in our haste to try to solve this particular problem, it seems to me that we have tended to overlook and forget the transportation problems of rural America which I think are basic to our entire economic development.

The single most obvious error in my opinion, which has occurred in recent years has been the oversell which has occurred in the ability of some yet unknown mode or modes of transportation or of mass transportation to solve the transportation problems of this country. There are a few urban areas where we certainly do need additional rail transportation and we need better intercity transportation, especially by buses.

In almost every city, in fact, we need improved public transportation. But in addition to these basic modes of transportation, there is nothing new around the corner. The basic mode of transportation is going to continue to be on the roads, streets, and highways of this country. That is certainly true in most urban areas. It is very, very

true in all rural areas. It will be small vehicle transportation, truck transportation on the roads and streets that we have. We cannot therefore, afford to let our basic highway and road and street system disappear or deteriorate.

It is interesting to note, I think, that the road and street system in this country did not originate with the motor vehicle. In fact, a lot of the development occurred even before the motor vehicle. The development of our trails into improved roads between wherever people wanted to move, of course, was our first road system and the improvements of the 1880's actually resulted from the first good roads movement as far as this country is concerned.

The motor vehicle, of course, has done a great deal to cause development of the system, but the basic system was laid out even before it was found necessary for that form of transportation, and it will continue to be so. In fact, the greater mobility provided by motor vehicle, and its speed, permits us to have less mileage of roads.

You will find as far as our rural transportation is concerned that the mileage of our roads has been decreasing in recent years and there are undoubtedly other roads that could be eliminated. It is only when there is great demand within a corridor that we can move to mass transportation, to something other than a relatively small vehicle operating on a road system. I would like to point out that even public transportation of the demand-responsive type might be by the small vehicle.

We have developed a good road system in this country. We have adequate miles of roads serving us and we have developed an excellent part of a good interstate system. But in doing so, we have forgotten, or failed to understand, that roads like anything else wear out and need repair and replacement. Here is where one of the major problems exist today.

In Indiana, for example on the 12,000-mile State highway system, most of it rural, present technology indicates we should be resurfacing about every 10 years to maintain the adequacy of this particular system. In recent years because of the lack of funds, we have been resurfacing at the most 600 miles a year instead of the 1,200 miles. Last year, because of the cost, only 400 miles were resurfaced.

On the Interstate System alone about 150 miles of Indiana's Interstate System is 15 years old and another 200 miles is 10 years old. Much of this is going to need resurfacing very soon. We have many interchanges that still require illumination and we need much better signing in some places. Some mileage will need additional lanes for safety. We have 4,800 bridges in the States, 171 of which are less than 20 feet wide on the State highway system and 119 carry only loads of 20 tons or less.

In the 92 counties in the State of Indiana, less than half of the roads are surfaced. Many of them are low-type bituminous surfacing which require maintenance more often. To the people who live in these rural areas along these roads, the only air pollution to them, and which they feel is very intolerable, is that of dust.

But a major problem that we have found is on the 68,000 miles of county roads where we have over 14,000 bridges. Of these, 10,000 of them are obsolete, weak, one-lane spans which are inadequate for today's county road traffic. That includes not only truck traffic, but also farm equipment which is getting wider all of the time, construction equipment, and school buses.

We have just completed a bridge inspection program in the State, not only those on the State system, but also on all the county roads. Let me give you a few examples of the findings.

In Greene County, 11 bridges were declared unsafe for any traffic, 18 more were unsafe for trucks, 117 bridges were found to need replacement over the next 10 years; estimated cost of these was \$7.2 million for a 10-year period.

Fulton County, six bridges were declared unsafe, 10 more recommended for replacement within 2 years and major repairs required on another 64 structures.

Owen County, 30 of 122 bridges in that county were rated as seriously deficient and placed under a 1-ton load limit. In Tippecanoe County, a recent posting of load limits on a number of bridges resulted in a rerouting of many school buses. This caused a great demand for better bridges and more adequate roads in that county.

Perhaps you have seen in some of the national publications recently, a school bus stopped on one side of a bridge and children getting out and walking across. That is quite common in Indiana. It happens every day when school is in session on a number of bridges because the load limit on them is so small that it is unsafe for a loaded school bus to go across.

To illustrate this bridge problem there are two appendixes to this testimony. One of these I particularly want to call to your attention is this folder relative to some of the 18 examples of the poor bridges in the State of Indiana. It is certainly not difficult to prepare a folder of this sort when you have thousands of bridges that are in need of some repair.

Three of the counties have so many deficient bridges, that at the rate they are presently able to replace them with the funds available, it will be 200 years before all are replaced. A greater number of counties will require over 100 years. This, of course, is an intolerable situation.

Most of our bridges in the State, county bridges, are over 40 years old. Many of them were built about the same time, 40 or 50 years ago. Within 50 miles of Lafayette, there are 1,500 such narrow bridges. As you can see, this is a real problem. It causes traffic hazards as well as the problem of getting materials to market and materials to the farmer. Farmer's livestock, grain, feed and fuel trucks have to detour around them. Volunteer fire trucks and other emergency and service vehicles must avoid them.

In addition to the serious bridge problem, there is the maintenance needs and the inability to replace our roads as they wear out. We have seen what happens to the railroads when we do not have adequate maintenance. They are in deplorable physical shape. We are paying the price for inadequate maintenance. I think it would be unfortunate if we as a State and as a nation allowed our highways to do the same thing.

This would not only be serious as far as getting people to and from their destinations but it would also increase safety hazards and accidents.

Indiana also has the problem that there is a sizable mileage of railroad that is going to be abandoned or that is proposed for abandonment. Let me note that I am convinced a sizable amount of this abandonment is justified. There are many of these miles that cannot

economically be justified. Some of these miles should be abandoned, but this means that the communities which they have been serving will now have to be served by truck. This further emphasizes the need for improvement of the highways and the bridges to these particular communities.

Perhaps one of the most alarming conditions, in addition to the factors I have already mentioned, is the cost increase that is occurring. I have some figures here as to how much various materials have increased in price. To sum it up, let me say it costs about twice as much today to build a highway of 1 mile or resurface the road as it did 10 years ago.

At the same time this has been occurring, we have seen our funds decreasing with the decrease in use of fuels since most of the income at the State level, as well as at the Federal level, is tied to fuel. This has resulted in less money for highways, less money available rather than more even though inflation requires more. In the first half of 1974 over 1973, we obtained about 7 percent less in the State.

The organizations I represent strongly applaud the interstate program and want to strongly encourage financing it adequately to completion. Although about 85 percent of the mileage has been completed, there is still about 36 percent of the total cost to go. We cannot afford to let this continue for another 20 years.

There are many locations where there are incomplete sections, temporary terminals or temporary routes; I believe the new highway bill calls some of these nationally important sections. These should receive the highest priority. These are the ones that need to be completed as rapidly as possible.

During this past 20 years that we have been building this system, other urban and rural highways have been placed in a lower priority. It seems to me that it is time now we recognize the great needs of the other systems, especially relative to improvement and maintenance. We need few additional miles, maybe none, of highways. But what we need is maintenance, reconstruction, restoration of our highway system again to a good highway system.

One of the other factors I want to mention is that last year Congress approved increased truck weights on the Interstate System. The Institute of Traffic Engineers believes that this action was not in the best interest of the Nation. The Federal Highway Administrator in testifying on greater weights acknowledged that greater weights would cause additional maintenance ranging from 20 to 25 percent and research certainly backs this up.

Those of us concerned with proper operation and safety of our several highway systems are deeply concerned that this increase in weight might be extended to other categories of roads, State roads and county roads on other systems, to their detriment. We are wondering where the additional money for the additional maintenance is going to be obtained since maintenance of these roads is even now a fundamental concern.

The Institute notes that all truck movements that use the Interstate System must begin and end on some other highway system and it seems only logical that the States will be inclined to extend increased weights to those highways as well. We do not believe there has been an adequate exploration of what the costs are of the additional main-

tenance and improvements which will be necessary for the additional weights. We find it difficult to visualize from where additional money is going to come in view of the fact there is insufficient money for maintenance now. We suggest not enough is known about the relative economics of truck weights, considering all costs.

The benefits of the heavier loads must be compared with the costs of road and bridge damage and obsolescence and consideration of where maintenance funds are going to be obtained. We strongly recommend that the truck weight action of the previous year be rescinded and that Congress call upon the Department of Transportation to provide a thorough report setting forth all the economic pros and cons of truck weights, and sizes as well.

The administration bill also indicates the desire to extend the Highway Trust Fund, but only for use on the Interstate System. Certainly, I and the organizations I represent strongly support retention of the trust fund for completion of the Interstate System. I want to point out there are other needs besides the Interstate System, especially adequate maintenance and rebuilding and it is clear that the present level of funding for construction, reconstruction and maintenance of the streets and highway systems is not adequate for the needs we have now.

It is also clear that if there is no growth in highway mileage or mileage traveled, which isn't certain at this particular time the present level of funding is needed for many years in the future.

We respectfully suggest, therefore, that any new or continued categorization or methods of funding which may be developed for the highway field or for the transportation field in general must continue to provide amounts for streets and highways at least equal to those now available. That is the important point.

Financing has been done well in recent years with the Highway Trust Fund, and we respectfully suggest that funds available for highway transportation for future years must be guaranteed. Additionally, it is important that all authorized programs and projects be related in such a way to the appropriations bill that adequate funding at the desired level exists in each and every category.

This could be achieved with lesser categories than we now have by specific appropriations for independently identified categories or by grouping categories together and placing them on some priority based system within a particular category.

One of the funding techniques of the Federal Government that has proved popular has been that of revenue sharing. I would like to point out that of all the funds received by the Indiana counties in 1973 for revenue sharing, 53 percent of it was used for county road purposes. I note that information because it shows the strong local interest in rural road improvements. This occurred because of public hearings, through discussions with the county commissioners and those responsible for allocation of these funds. The result was clear, the citizens desired improved and better maintained roads and streets and they obtained them with these funds.

Improvement of our highways is also desirable from a safety standpoint. I do not believe we ever can forget safety. Serious accidents are more common in rural areas than they are in urban areas, even though there are less accidents in rural areas. There are more fatal accidents in rural areas.

We need to do much more in removing or minimizing hazards on the rural highways. There is much yet to be done, removing obstructions near the road, improving design, eliminating sharp curves, widening roads and bridges, installing adequate control devices, providing a less slippery surface, installing better train-warning devices at our grade crossings and many others. We need not only to have such improvements authorized in the legislation, but these are ones which need to have a specific appropriation for them in one of the categories.

We have noted that there is insufficient funding at today's level for today's construction and reconstruction, and I have also made the point relative to maintenance. I know there are many who suggest that perhaps Federal funds ought to be made available for maintenance. I would like to point out that there are two types of maintenance, much of which should be classified as improvements. I am not talking about maintenance that lasts for only 1 year, but maintenance improvements which have a several year life. One is maintenance of the pavement and one is maintenance of the traffic flow through features of the street and highway system, signing, marking other controls and regulations. This is very important. These become obsolete far faster because of new developments. These features are what facilitates movement of traffic and improves safety.

As a final comment on funding, let me support the position that if Congress does not provide Federal aid other than to the Interstate System, then it should eliminate other Federal taxes on the highway users and return to the States the option to impose equivalent taxes. A portion of that position is in the proposed administration bill. If fuel taxes do not become Federal funds for highways, perhaps more of the fuel tax than what is proposed should be returned to the States.

I note also the desire for information on rural mass transportation needs, and public transportation to deal with it. We have not done research in this particular area, but I am convinced from reading the research that has been done that where there is need for rural public transportation it must be of the demand responsive type. It, of course, would not really be mass transportation. It would be almost individual transportation and probably small vehicle transportation.

I would also like to note that I realize there are some elderly people in rural areas who need transportation. I am also convinced that in most of these areas, the Federal Government cannot realistically be involved and that such care should be left as a moral obligation of individuals, such transportation needs can better be handled by friends and family, by people who are knowledgeable of the situation and who can provide love with assistance.

I am grateful for this opportunity to express this information and thank you for the opportunity of being here.

[An attachment to Dr. Michael's statement follows:]

TRAVEL AT YOUR OWN RISK!

A glimpse at one of Indiana's most
serious transportation problems —
antiquated, unsafe rural bridges.



Thousands of Horse-And-Buggy Bridges on Rural Indiana Roads are
a Costly Hazard for School Buses, Farm Trucks and Other Traffic

■ Recently completed safety inspections of thousands of bridges on Indiana's county roads have focused attention of a frightening situation.

• Over 6,500 of these bridges are unsafe for standard-sized school buses. They are also inadequate for heavy trucks needed to serve Hoosier farmers.

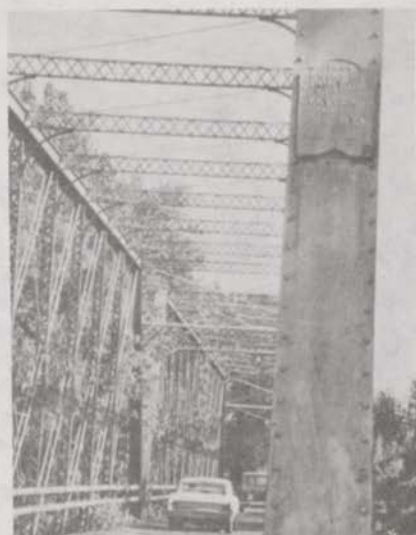
• More than 1,500 critically deficient bridges need to be replaced immediately. Another 8,150 unsafe structures need immediate repair. It's recommended that 4,680 of these old bridges be replaced or rebuilt in the next five years.

• Utilizing all available revenue, it would take most Indiana counties 50 to 100 years to bring their bridges up to adequate standards.

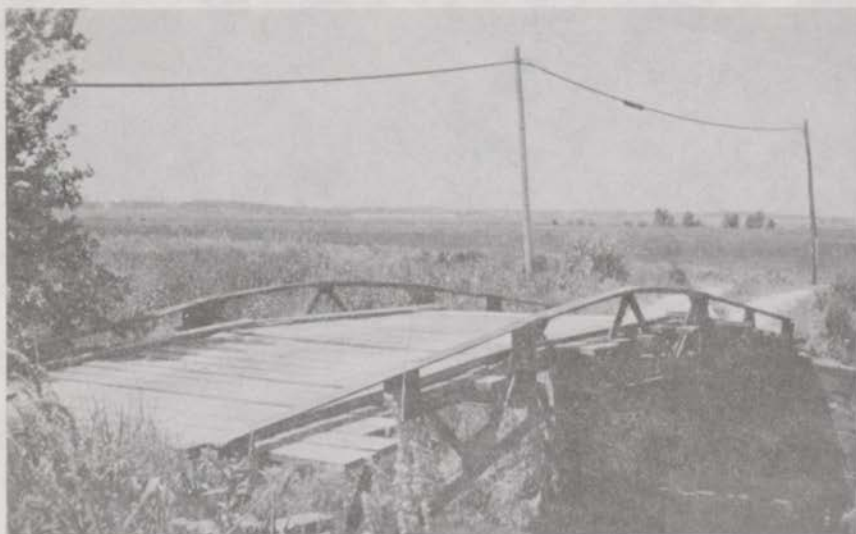
Unsafe bridges are just part of the problem. More than half of Indiana's county roads are still not hard surfaced. And many of the rail lines serving these rural areas have either been abandoned or are in serious disrepair.

A good rural transportation system is vital to Indiana's economy. County roads and bridges are the essential first link in this system. The bridges pictured in this folder are not untypical. They create a problem we can't ignore.

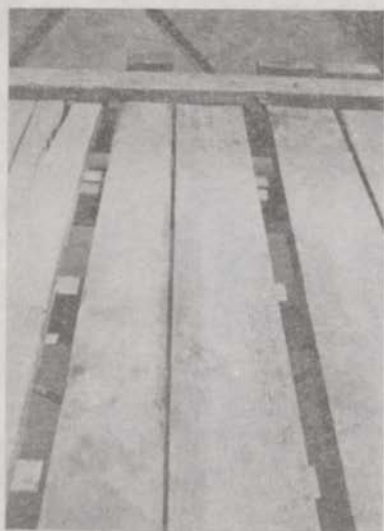














Indiana Highways for Survival, Inc.



P. O. Box 603, Indianapolis, Indiana 46206

Senator STAFFORD. Thank you, Dr. Michael.

The Chair will invite Mr. J. R. Coupal, Deputy Administrator, Federal Highway Administration to join the panel. Then we will get to general discussion.

In view of the fact that Senator Domenici has another urgent engagement, the Chair will yield to him first to proceed with questions.

Senator DOMENICI. Thank you, Mr. Chairman.

I have a couple of questions. Mr. Michael, I read your statement and heard you talk about revenue sharing and you used a percentage, you said 53 percent of that was used for basically roads, either maintenance or the purchase of equipment. Were you speaking of an individual State or was that a generalization nationally?

Dr. MICHAEL. I was speaking of counties in Indiana. That is the only area for which I have information.

Senator DOMENICI. Does anyone know what the figure would be nationally with reference to counties and their use of general revenue sharing funds, percentagewise for road-related matters?

Mr. COUPAL. We don't have that. I am sure we can get it for you.

Senator DOMENICI. Would you get that for us?

Mr. COUPAL. Yes, sir. (See p. 1136.)

Senator DOMENICI. I would personally assume it is very similar across the country from the two or three States that I am aware of.

With reference to the suggestion on innercity subsidization, did I understand correctly that what you were talking about was to turn over all the revenues obtained to the agency and the difference between the two would be the subsidy?

Mr. WEBB. Yes, Senator, that is correct.

Senator DOMENICI. I don't know that you were talking about anything workable. But it is an intriguing idea for the limited kinds of innercity transportation. I wonder how we would be sure at the national level that a substantial portion was being paid for by the user? Would the fixed dollar figure not tend to just sort of cement the subsidy?

Mr. WEBB. The \$1 figure is intended to represent generally what it costs today to operate a bus for 1 mile.

Senator DOMENICI. What I am getting at is what impetus would there be to maximize that company's obtaining the revenues from the passengers?

Mr. WEBB. The program as I visualize it would be operated under the supervision of the appropriate State agency. I guess in most States it would be the State department of transportation. Certainly, the operator would be required to do all that he could to maximize revenues, to generate as much revenue as he could. He would be under the terms of his contract providing as much service as the contract called for and the quality of service that the contract called for.

Senator DOMENICI. Just a general question for anyone that would like to answer it. It appears to me that in rural America there is one system that is at least to some extent adequate and that is the school bus system. It may vary from State to State and it may be paid for in different ways and it may be good in some States and medium in another, but basically, most American children, even on a huge Navajo reservation, are being given the ability, the opportunity to get on a bus and go to school.

It seems to me as I travel rural parts of my State and others that at 11 o'clock in the morning, I see a house up there which is obviously the school bus owner with 12 buses parked up there. I guess if I got by there at 2:30 in the afternoon, they would all be gone and moving around somewhere. But is there any validity to the notion that this is a significant system that is underutilized, and that has the potential for flexibility of use in providing rural transportation of one type or another? I understand it has got some serious limitations in terms of size, and so forth, but are there any opinions on that?

Mr. SALTZMAN. Senator, if I might, we have found various community action agencies that use schoolbuses or surplus Government agency vehicles which were similar to schoolbuses. The use of these vehicles provided a whole social stigma about the system. They were perceived as poor people's buses, and people were very reluctant to ride them. That was the first problem.

The second problem was for the elderly and handicapped they were very inaccessible and very uncomfortable. I think in the long run you do better with the small vehicles and developing reasonably priced vehicles that are able to handle 10 to 15 passengers, which is the type of vehicle which can better handle the terrain that we find in many of our rural areas, especially in the mountainous areas.

I don't believe that the cost savings of using a schoolbus are justified, given the inconvenience and poor-ride quality you get from the schoolbus.

Senator DOMENICI. Any other opinions on that?

Mr. MICHAEL. The schoolbus of course is a solution which looks to be a very good possibility, because they certainly are sitting around and not doing anything for a share of the day.

In our particular State the trend, however, is toward much larger schoolbuses rather than toward smaller ones so as to make it less costly as far as that operation is concerned. To carry the few people that I envision would be necessary for public transportation in the rural areas, such a large bus might be more costly than what a smaller vehicle would be.

Such vehicles certainly could provide better and more comfortable transportation and to make the changes needed to adequately handle the handicapped in a schoolbus might be real difficult.

Mr. SALTZMAN. Let me note that section 16(b)(2) of the Urban Mass Transportation Act has recently been implemented. The Department of Transportation recently handed out 2,283 vehicles on behalf of 1,031 nonprofit organizations across the country.

This primarily is a program to aid nonprofit organizations when the mass transit system is not doing an adequate job, when the elderly and handicapped are not provided services. It is my understanding that most of these were small vehicles. Most of these went to the small urban areas because that is where there were inadequate public transportation services.

Let me also note here that none of these were coordinated. They were simply local proposals thrown into the State hoppers and the State transferred it to the Federal Government. One of the first things we can do would be to make some stipulations on the 16(b)(2) money to require at least a moderate amount of coordination with the local areas.

I can imagine in some States, I can even point to the State of North Carolina, there are some 26 organizations that were receiving vehicles, probably one or two buses in each case.

In fact, in some of our urbanized areas, I would guess there were at least two or three recipients. This is ludicrous. It is inherently inefficient. I think there should be ways of consolidating resources. Some of our research indicated in the small city of Greensboro with 150,000 population there were 20 social service agencies spending well over \$50,000 a year on providing transportation services.

I think there is no question in my mind that it could have been done more efficiently if they were forced to deal with consolidated systems.

Mr. COUPAL. We have a rural demonstration program now getting underway. We are hopeful that we will learn something from this program. Some of those projects ought to be concerned with the use of schoolbuses. We do think there is an asset here that is not fully utilized.

We hope, in spite of all the problems that the other gentlemen have enumerated—and they are very real problems—that we can solve some of those through this rural demonstration program.

Senator STAFFORD. Would the Senator yield just a second on this subject of schoolbuses?

Has anybody made any study as to how much more rapidly the schoolbuses would wear out if they were utilized for public transportation in rural areas as well as the function of serving schools? Has there been any data accumulated on that?

Mr. COUPAL. None that I know of, Senator. I suppose it would depend on the extent of the usage.

Senator STAFFORD. I should think it might be worthwhile to develop some data so that we could make a judgment in that area.

Mr. MICHAEL. I cannot answer the question as to how much quicker they would wear out, but I do know many schoolbuses are replaced not because they wear out but because of obsolescence in the types of safety equipment and new requirements.

Senator DOMENICI. You answered the question with reference to schoolbuses, Mr. Coupal, but another point was injected into the discussion with reference to 16(b)(2) section funding as to the lack of coordination under that section.

Did you hear the comment of the consultant on that?

Mr. COUPAL. I am not sure which one.

Senator DOMENICI. Perhaps you would repeat that portion of it.

Mr. SALTZMAN. I am referencing a press release by the Department of Transportation, Urban Mass Transportation Administration for release Wednesday, July 16, 1975, which suggests that 2,283 vehicles are being purchased to aid mobility of elderly and handicapped persons. This is done on behalf of 1,031 nonprofit organizations, just a bit over two vehicles per nonprofit organization.

I was suggesting in addition that the current legislation just says hand out the money, does not require any coordination at all.

Mr. COUPAL. Yes; I am familiar with that.

Senator DOMENICI. Would you care to comment on that?

Mr. COUPAL. Only that it is an Urban Mass Transit Administration program and the Federal Highway Administration was not a party to the policy or the regulations.

Senator DOMENICI. What you are saying is we want to get the details on that, we have to get UMTA up here.

Mr. COUPAL. I think that would be helpful.

Senator DOMENICI. Just two last questions. I appreciate the chairman giving me this opportunity.

With reference to transportation for the elderly, as I understand it, we did place some funds in the discretion of the Federal Highway Transportation Department to be administered through the States. Is that correct?

Mr. COUPAL. Are you talking about the rural transportation demonstration program?

Senator DOMENICI. Yes.

Mr. COUPAL. Yes.

Senator DOMENICI. As I understand it, it is in operation. States are doling them out to applicants on a demonstration basis. Is that correct?

Mr. COUPAL. Not yet. We are still accepting applications. We expect to get the first grants out by September.

Senator DOMENICI. How much money is in that program?

Mr. COUPAL. The 1975 appropriation was about \$9.5 million. We have asked for, I believe, \$12 million in the 1975 Federal Highway Act for 1976.

Senator DOMENICI. Are you running into problems with reference to the States setting up regulations as to who might qualify?

Mr. COUPAL. None that I am aware of. We are still accepting applications. We have about 300 applications. If we funded them all, it would run to about \$100 million. Our problem now is to select out of those the appropriate projects that will do the most good in demonstrating what can be done in this field.

Senator DOMENICI. I would ask you to look into just one thing for me and I think it would be generic to the entire country.

In my State, it is my understanding, that the State highway commission decided that of the two kinds of agencies that are operating and that are providing service for the elderly, one being the nonprofit organization and an extension of the cap agency, and the other being where a county has taken it over under the older Americans Act, that by regulatory definition one of those kinds of entities is excluded totally by saying that only the nonprofit would qualify, so if the county is running it, it would not qualify at all.

It appears to me that you certainly are not going to get a good test case in the demonstration area unless you at least try both.

Second, you are significantly penalizing those areas where the county has seen fit to get heavily involved in the process of distribution of services for the aging by eliminating them from even a trial run.

Mr. COUPAL. Senator, we do have some discretion here. We agree completely with you. One of the criteria we will use is how well inter-agency coordination is carried out. We are very anxious to make sure that all agencies participate in this.

Senator DOMENICI. I thank the chairman for yielding to me.

Senator STAFFORD. Thank you, Senator Domenici.

The subcommittee is very pleased that the chairman of the full committee, the distinguished Senator from West Virginia, Mr. Ran-

dolph, is with us this morning. This Senator has thoroughly enjoyed serving on this committee, and one of the basic reasons is the outstanding leadership which the chairman has given the committee, and beyond that his deep involvement in the work of all of its subcommittees.

I don't really know where he finds the time, but we are very, very happy Chairman Randolph is here with us this morning.

Senator RANDOLPH. Thank you very much, Mr. Chairman.

I think one of the privileges that I have as chairman of our committee is seeing the cooperative effort in subcommittee and committee on the part of all members. Never has there been a division on party lines whatsoever.

We have viewpoints. We have interests that we may have in greater degree in one subject or another. Our committee, as you know, and the Senator from New Mexico knows, covers a wide range of subject matter.

I know perhaps no committee that has the range of subject matter that we do under our jurisdiction.

I think in reference to what Senator Domenici was saying, it is about \$35 million, isn't it, Mr. Coupal, that is involved in appropriations for the rural demonstration program?

Mr. COUPAL. We have 9.65 appropriated now. There is another \$20 million that has been authorized but not appropriated.

Senator RANDOLPH. I was in error about the amount. I thought it was \$35 million.

Mr. COUPAL. I think that is approximately the amount that has been authorized.

Senator RANDOLPH. Another \$25 million instead of \$35 million is the thinking of the Senate Appropriations Committee. Is that correct?

Mr. COUPAL. It may very well be. That is not the amount in our appropriation request.

Senator RANDOLPH. Following this subject I know that in the Banking Committee in recent hearings UMTA officials have indicated that they wish to review the results of the rural highway transportation demonstration program before they make commitments on support of the operating subsidies that would be applied in rural areas.

At the present time what is the actual status of the demonstration?

Mr. COUPAL. Senator, we are still at this point accepting applications. We have about 300 of them in-hand.

Senator RANDOLPH. That is what I wanted to know. You had said earlier you were accepting applications.

Mr. COUPAL. We anticipate that by September we will have these reviewed and analyzed. They are now in our regional offices. They will come into Washington. We hope to have projects underway by fall.

Senator RANDOLPH. What would be the total estimated cost?

Mr. COUPAL. Of the 300 applications?

Senator RANDOLPH. Yes.

Mr. COUPAL. About \$100 million.

Senator RANDOLPH. Is this in line with your thinking?

Mr. COUPAL. This is the estimated cost of the 300 applications that have been filed so far.

Senator RANDOLPH. What are the restrictions that come to you of the type proposals that they set down?

Mr. COUPAL. There is a wide range of projects that have been suggested, all the way from demand response.

Senator RANDOLPH. What was that?

Mr. COUPAL. All the way from demand response, a small vehicle projects, through utilization of school buses for other purposes than schoolchildren transportation. There is a very wide range of suggestions that have been made.

Senator DOMENICI. Mr. Chairman, I wonder if you would permit me to ask you and Senator Stafford one question before I leave? I must leave. It comes to me, Mr. Chairman, as I hear these witnesses, especially the consultant, Professor Saltzman, describe this problem, that since this subcommittee has undertaken the task of a very broad look at transportation that it might be in order for us to ask our staff to get for us—this is probably not an urgent thing, but perhaps as soon as possible—a summary of the various funding programs that are related to transportation for rural areas but that might not be specifically provided for under either UMTA or the Department of Transportation.

What I am speaking of would be to get a summary, for instance, of how much HEW might be spending for aging, and how much other programs that we have might be spending for community action type poverty programs. This would help us get a feel for how much is being spent that might not be related one to another so that we might address the possible coordination or flexibility that the Professor has spoken of with reference to bringing these together through some kind of a mandate.

Senator RANDOLPH. I think, Senator Domenici, that Senator Stafford and I would believe that is a very proper question. We have the information, I am told. It can be placed in the record. I believe it should be in connection with these hearings.

I believe there are some 85 programs, believe it or not, in the Federal Government that attempt to cope with these problems in one way or another. They come from Agriculture; from HEW; from Housing and Urban Development, and several other divisions of agencies.

[The information referred to follows:]

SOURCES OF FUNDS FOR RURAL TRANSPORTATION PROJECTS U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

AGENCY AND PROGRAM NAME ¹

OE	Adult Education Programs.
SRS	AFDC
	AGING:
OHD	State and Community Programs (title III).
OHD	Nutrition (title VII).
PHS	Alcoholism.
PHS	Appalachian Health Program.
OE	Bilingual Education.
OE	Career Opportunities Program (COP).
PHS	Community Mental Health Centers.
SRS	Community Services.
PHS	Comprehensive Health Planning.
PHS	Comprehensive Public Health Services.

¹ See footnotes at end of table.

SOURCES OF FUNDS FOR RURAL TRANSPORTATION PROJECTS U.S. DEPARTMENT
OF HEALTH, EDUCATION AND WELFARE—Continued

PHS	Crippled Children and Special Projects.
	Day Care (See Head Start).
OE	Desegregation (title IV).
SRS	Developmental Disabilities Program.
OE	Dropout Prevention.
OE	Drug Education, Nutrition and Health.
	Education:
OE	Agency Leadership Grants.
	Bilingual (See Bilingual Education).
OE	Broadcasting Facilities.
OE	Comprehensive Planning and Evaluation of.
OE	Environmental.
OE	Equal Education Branch (See Desegregation title IV).
OE	Grants to Strengthen State Departments.
OE	Handicapped.
	Urban/Rural (See Urban Rural School Development Program).
	Vocational (See Vocational Education).
PHS	Emergency Medical Services.
OE	Emergency School Aid (ESAA).
OE	ESEA—Title I.
OE	ESEA—Title III.
PHS	Family Planning.
OE	Follow through.
OHD	Head Start.
PHS	Health Maintenance Organizations.
PHS	Health Services Development—Project Grants (314(c)).
OE	Higher Education Facilities.
PHS	Hospital Improvement.
OE	Impacted Area Assistance ("SAFA").
	Juvenile Delinquency (See Youth Development).
OE	Library Services.
SRS	Medicaid.
PHS	Migrant Health.
PHS	Narcotic Addiction and Drug Abuse.
OHD	Native Americans Programs.
	Nutrition (See AGING, Nutrition: See Drug Education, Nutrition and Health).
PHS	Public Health (See Comprehensive Public Health Services).
SRS	Regional Medical Program.
	Rehabilitation Services (See also Developmental Disabilities Program).
	"SAFA" (See Impacted Area Assistance).
	Special Student Services (See "TRIO" Programs).
SSA	Supplemental Security Income (SSI).
	Talent Search (See "TRIO" Programs).
OE	"TRIO" Programs.
	Upward Bound (See "TRIO" Programs).
OE	Urban/Rural School Development Program.
OE	Vocational (and Technical) Education (Formula):
OE	Cooperative Vocational Education.
OE	Curriculum Development in.
OE	Exemplary Programs and Projects.
OE	Research and Training in.
OE	Work Study Programs for.
	"WIN" (See Assistance Payments).
OHD	Youth Development.

See footnotes at end of table.

SOURCES OF FUNDS FOR RURAL TRANSPORTATION PROJECTS, U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—Continued

U.S. DEPARTMENT OF LABOR

AGENCY AND PROGRAM NAME ²

MA	Comprehensive Manpower Services, title I (CETA).
MA	Job Corps, title IV.
MA	Public Employment Programs, title II (CETA).
MA	Summer Program for Economically Disadvantaged Youth.

U.S. OFFICE OF ECONOMIC OPPORTUNITY ³

CAP	Community Action.
OEO	Emergency Food and Medical Services.
OEO	Senior Opportunities and Services.

U.S. DEPARTMENT OF TRANSPORTATION ⁴

FHWA/UMTA	Rural Highway Public Transportation Demonstration Program.
UMTA	Urban Mass Transportation Capital Improvement Grants.
UMTA	Urban Mass Transportation Capital Improvement Loans.

AGENCY CODE

² Health, Education and Welfare:
 OE—Office of Education.
 OHD—Office of Human Development.
 PHS—Public Health Service.
 SRS—Social and Rehabilitation Services.
 SSA—Social Security Administration.

³ Labor:
 MA—Manpower Administration.

³ Office of Economic Opportunity:
 CAP—Community Action Program.
 OEO—Office of Economic Opportunity.

⁴ Transportation:
 FHWA—Federal Highway Administration.
 UMTA—Urban Mass Transit Administration.

This list is extensive but not complete. It is presently being revised to include programs in the Departments of Justice (LEAA), Commerce, Agriculture, ACTION, and HUD for which transportation funds *could be* available for program clients.

Mr. COUPAL. Before the Senator leaves, may I add one word? We do have a task force headed up by some of our staff meeting with these other agencies, coordinating this program to make sure we are not getting duplication and that many of the programs are also, the demonstration projects, are aimed at transportation of the handicapped and transportation of the elderly.

Senator RANDOLPH. Thank you very much.

Mr. Coupal, I don't want to pursue the applications and the types that they are, but of the 300 that you have, I believe it would help our subcommittee and the committee very much if you could be more descriptive of those proposals, if you can pull together the information for us.

Mr. COUPAL. May we do that for the record?

Senator RANDOLPH. Yes, at a later date.

Mr. COUPAL. We will give you the analysis of the major types.

Senator RANDOLPH. That would be helpful.

[The information requested follows:]

U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL HIGHWAY ADMINISTRATION,
Washington, D.C., July 24, 1975.

Hon. LLOYD BENTSEN,
Chairman, Subcommittee on Transportation, Committee on Public Works, U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: During the course of the Subcommittee hearings on Monday, July 21, Senator Randolph asked us to provide information for the record relative to the types of proposals we expect to receive under the Rural Highway Public Transportation Demonstration Program.

It should be noted that all proposals are presently being reviewed by the regional panels and this information is, therefore, not based on actual applications received.

Demonstration projects will present a variety of service strategies ranging from door-through-door demand responsive to subscription service to fixed route, regularized service. The projects will also present a variety of service area concepts: intracounty, multicounty or regional, and Statewide programs. In addition, proposals are expected to include a representative sample of the following strategies:

1. Alternative vehicle types, e.g., taxicabs, small buses, school buses, jeeps and private automobiles.
2. Prepaid, reimbursable or transportation-voucher system of fare payment.
3. Multi-use vehicles, e.g., integrated passenger and goods delivery services (such as "meals-on-wheels" or post-bus operations).
4. "Grass-roots" volunteer-automobile drivers incentive program.
5. Alternative population groups: elderly or handicapped, Indians, migrant workers.
6. Alternative geographical locations representing topographical and/or meteorological variances.
7. Integrated funding sources (e.g., pooling of various DOT/HEW/Community Services Administration funds with State and local funds).

After projects have been selected, we will be happy to present the Subcommittee with a more detailed description, should it be desired.

Also, Senator Domenici requested information about the use of revenue sharing funds by county governments for transportation purposes.

We contacted Mr. Graham Watt, who heads up the Revenue Sharing Program in the Treasury Department. He informed us that a survey of fiscal year 1973 revenue sharing programs reported by 2,968 counties revealed that 23 percent of revenue sharing funds were used for public transportation. This 23 percent was made up of 9 percent for operating and maintenance funds and 14 percent for capital expenses.

This 23 percent use of revenue sharing funds for public transportation puts this category in first place, tied with public safety projects, for revenue sharing expenditures.

Sincerely yours,

J. R. COUPAL, Jr.,
Deputy Administrator.

Senator RANDOLPH. As we think of what I call rural intercity bus service, I would like to have Mr. Webb give us his thinking. I believe you have discussed or proposed an amendment for subsidized rural and intercity bus service. That has not been adopted?

Mr. WEBB. It has not been.

Senator RANDOLPH. What would be the cost for this service? Would it be as little as 10 cents per mile, 20 cents per bus mile and 2 or 3 cents per passenger mile; you, I believe broke it down that way.

Mr. WEBB. Yes, we believe that a cost for a great deal of the service would be in that very modest range.

Senator RANDOLPH. How did you arrive at those figures?

Mr. WEBB. We arrived at those figures simply by looking at the bus companies which have gone out of business.

Senator RANDOLPH. Are there many?

Mr. WEBB. There have been many over the past 20 years. They have gone out of business simply because their deficit is 1 cent per passenger mile, or something like that. In other words, a small operator, if he makes no profit, he goes out of business. It would not take a great deal to keep a small operator, providing service to these rural and small urban areas.

Senator RANDOLPH. Do you think, Mr. Coupal, that the figures Mr. Webb is quoting, would fall under the umbrella of subsidy?

Mr. COUPAL. Talking about subsidizing private bus operation; yes, they would.

Senator RANDOLPH. Do you have any comment on these figures?

Mr. COUPAL. No.

Senator RANDOLPH. That would be a matter for study; yes?

Mr. SALTZMAN. Senator, I would like to comment on the rural areas that are being provided intercity bus transportation. We should not expect the intercity operators to really provide local transportation to the disadvantaged, the way that some of the systems that we have looked at are currently doing. Providing a subsidy to the intercities would still not provide this local door-to-door transportation service.

I am not saying that it is not a good idea to provide the subsidies to the intercities operators but we have to keep in mind the order of priorities in the rural areas. My order would be to serve the elderly, the handicapped and the poor people first and then begin to consider the work trips.

Senator RANDOLPH. Go back over your breakdown. What was the first one?

Mr. SALTZMAN. The way we have been approaching the rural public transportation problem, is that this should not be considered an urban transportation problem with the same sort of priorities, that in the rural areas the persons with highest needs, those who are not making the trips are the elderly and the handicapped.

The second group, I think, is important to consider is the poor people who cannot own an automobile, or those who cannot drive it. I think these are kinds of persons that are best served by the demand-responsive type of transportation that provide individualized services.

I think it would be excellent if intercity carriers went into the local business, and if urban systems would extend their services into rural areas. However providing transportation services in the rural areas is a very different problem than in the urban areas.

Senator RANDOLPH. Do we need one or the other or both?

Mr. SALTZMAN. I think we need both. I believe the urban systems have to operate, to solve congestion and pollution problems but I think in the rural areas we still must have transit services for persons who are disadvantaged. Simply because they did not have adequate transportation services in the rural areas, many of the persons we looked at were simply not able to get to needed social services.

That is why the systems were being started. I think in your own State of West Virginia the new TRIP program is an exciting example of how this will be accomplished. I note in the trip system the interstates will be included, but in noting that I also have to point out that there are some very local sorts of trips that have to be provided for. I don't think the intercities can or will provide the trip from the very small town which is off the main highway to the medical center.

Some of the trips we found in North Carolina took a 159-mile round trip simply to get someone to a medical center every Wednesday.

I think these are the kinds of trips that have to be provided by the localized service.

Senator RANDOLPH. Senator Stafford well knows that that was our original concept, I believe, when we thought of the program and gave it this trial in West Virginia.

I was just thinking as you talked, I was in the area a few days ago, that we will take a county seat, for example, Marlinton in Pocahontas County seat, in my home county and then moving north, let's say, to Clarksburg in Harrison County or Morgantown in Monongalia County.

We have to have those points hooked together somehow, but we also have to think of the feedin from the actual countryside, the rural areas into that so-called trading area, town, the county seat, which might run 3,000 or 4,000 people or 8 or 9 or 10 or 12, something of that kind. Is that right?

Mr. SALTZMAN. Yes, that is what I was thinking. I don't mean to say that we can't provide good services intercity with the intercity operators but the feeder services are definitely necessary.

I think that to get into some of the hollows in the various States that are mountainous, we need these smaller vehicles and the demand-responsive type services.

Senator RANDOLPH. I think your categories, the elderly; the elderly who are handicapped, the younger who are handicapped and those who are with less funds, represents a breakdown that is realistic.

We must not overlook this responsibility of helping these people because their services need subsidy. Sometimes subsidy is merited. They certainly are not only merited, but often they are absolutely necessary in groups of this kind. Is that your understanding?

Mr. SALTZMAN. Yes, sir. I think that is where the highest need exists and we should pay attention to them first especially in rural areas.

Senator RANDOLPH. Do you have this type of problem in North Carolina as we have it in West Virginia?

Mr. SALTZMAN. We certainly do. The community action agencies had started eight rural transportation systems in North Carolina. Unfortunately, half of them currently exist because the funding allowing them to exist is just not available right now.

Senator RANDOLPH. Mr. Coupal, I understand that the amounts appropriated for programs in the forests and highways, those in that category, will be taken off the top of the rural transportation assistance program; is that correct?

Mr. COUPAL. Yes, sir. That is the proposal of the administration.

Senator RANDOLPH. That would result in less than \$1 billion rural road program. I believe you gave a \$950 million figure for rural programs that would be apportioned among the States. Is that a correct breakdown?

Mr. COUPAL. Yes. The proposal is for \$1.05 billion in 1977.

Senator RANDOLPH. I want to question this procedure only because with the deterioration of our rural roads, what is your discussion here?

Mr. COUPAL. Of course, we have pressures from two sides on this. We have great needs in the rural highway system as well as the urban highway system and the interstate system. We have tremendous

highway needs that are unmet, and we also have tremendous economic problems.

The amounts that have been included in the administration bill are those amounts that we believe to be the best possible tradeoff of these contradictory pressures, conflicting pressures.

Senator RANDOLPH. I think some of the other gentlemen might be helpful on this subject. Mr. Michael?

Mr. MICHAEL. I appreciate the needs as far as urban areas, as well as on the interstate system. I certainly do, but I think there is a fallacy that may exist here.

With the cost of improvements, maintenance and everything being much higher, we no longer can look at funding in the same total amount as far as transportation is concerned. It is simply going to cost more to do the things that are needed.

We are going to have to come up with the funds for improving our roads, both the secondary as well as the State and finishing the interstate system as well as improving railroads and public transportation.

They are all important, but I think we are trying to live within the same total dollar budget as far as transportation is concerned. Personally, I do not believe that can be done anymore.

Senator RANDOLPH. Charlie, I think maybe you ought to have something to say on this because I do believe that you are out among the farmers, aren't you?

STATEMENT OF C. H. FIELDS, ASSISTANT DIRECTOR, CONGRESSIONAL RELATIONS, AMERICAN FARM BUREAU FEDERATION

Mr. FIELDS. Yes. Senator, I speak from the perspective of being nationwide—our organization is in 49 States and Puerto Rico. We have organizations in over 2,800 counties. So we have a broad perspective in the rural areas.

Let me say that we are very strongly against the administration's proposal to take the first step in destroying the Highway Trust Fund. We think it should be maintained as it is. If anything, it needs to be increased, not decreased. We think it is morally wrong to say to the highway users of this country that we are going to tax you for the use of the highways, then we are going to take part of the money away and we may give it back to you and we may not.

So we are strongly against the administration's proposal.

I would want to join in Professor Michael's statement with regard to the rural highway situation. The bridge situation is particularly critical.

This is certainly no time for us to countenance getting into kind of a deferred maintenance program in the highways that we are already in in the railroad situation. I also think that we ought to be careful to keep our eyes on the realities of the situation and, although some of these fringe problems of the rural transportation situation with regard to the elderly and the crippled, and so forth, are important, I wonder if it wouldn't be better to approach that from the local level using revenue sharing funds rather than having the Federal Government into all of these areas, that maybe we ought to concentrate on the main highway system and the traditional cooperation we have had between the Federal Government and the States and localities.

I just caution that we ought to keep our eyes on this important thing of maintaining a basic highway system that we all need.

I would also add that we are now beginning to see an out-migration to the rural areas in this country. That trend, as you know, has been reversed in the last 2 or 3 years. Not only is it important to maintain these highways for the farmers and the rural people in this country, but the last time I looked, Senator, we all eat and wear clothes.

So that this rural highway system is not only important to rural America, it is important to urban America because they want some food to eat and some clothes to wear.

If we don't have an adequate highway system, it is going to increase the costs of transportation both of materials to the farms and of the food away from the farms.

So that this is not a rural versus urban thing. This is important to all Americans.

[Mr. Fields prepared statement follows:]



FARM BUREAU

TESTIMONY

Farm Bureau is a free, independent, non-governmental, voluntary organization of farm and ranch families united for the purpose of analyzing their problems and formulating action to achieve educational improvement, economic opportunity, and social advancement and, hereby, to promote the national well-being. Farm Bureau is local, statewide, national, and international in its scope and influence and is non-partisan, non-sectarian and non-secret in character.

THE HIGHWAY PROBLEM

Presented to
THE TRANSPORTATION SUBCOMMITTEE
OF THE SENATE PUBLIC WORKS COMMITTEE

by
C. H. Fields, Assistant Director, Congressional Relations

July 21, 1973



The American Farm Bureau Federation is a general farm organization with a membership of more than 2,000,000 member families in more than 2,800 counties in 49 States and Puerto Rico.

Organized County Farm Bureaus



STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION
TO THE TRANSPORTATION SUBCOMMITTEE OF THE SENATE PUBLIC WORKS COMMITTEE
RE: THE HIGHWAY PROBLEM

Presented by C.H. Fields, Assistant Director, Congressional Relations

July 21, 1975

Farm Bureau is a voluntary association of 2,393,731 families in forty-nine states and Puerto Rico and is the largest general farm organization in this country.

We welcome the opportunity to express our views on the highway program, with particular reference to the situation in rural areas. In January, 1975, at our 56th annual convention in New Orleans, the voting delegates of the member State Farm Bureaus adopted a series of statements on transportation, indicating the interest and concern of farm people on a broad range of issues affecting the transportation system. This policy statement begins:

"We support the development of a sound, long-range national transportation policy encompassing all modes of transportation to guide the development of the most economical and energy-efficient methods of meeting the transportation needs of the future, and to provide greater equity between modes in regulation, competition, and government assistance."

Highways And the Mobility of Americans

In recent years it has become fashionable in some places to downgrade the importance of highways and the use of motor vehicles for the movement of people and goods. The constant attack on the Highway Trust Fund, the identification of the automobile as a major source of air pollution, and the effort to increase public expenditures for, and usage of, public transportation have reduced public attention to highway programs and increased attention to the so-called "mass transit" systems.

It may seem trite to say so, but we believe firmly that the ability of people in this country to move about freely and the capacity of our transportation system to move goods even into the remotest areas are fundamental to what we know as the American way of life. While the energy situation poses new challenges to that way of life, the American people are not going easily to give up this mobility, this freedom to move about in privately-owned motor vehicles going where and when they want to go. Any planning based on the notion that large numbers of people can be enticed or coerced into using public transportation to get to work or to travel for other purposes would be unrealistic.

This is particularly true for those who live on farms or in rural areas where the highway system and the motor vehicle provide not only practically all personal transportation but also a major share of the essential transportation of goods. This will continue to be the case. This fact of life is important not only to farm people and other rural residents but also to all other Americans who wear clothes and eat food.

We do not quarrel with the fact that public transportation in the high-density urban areas needs improvement and expansion. However, a Department of Transportation report to the Congress last year indicated that if all state and urban government proposals for upgrading transit systems (costing some \$61 billion in 1971 dollars) were actually built, transit trips would increase only from 5.2 percent to 6.2 percent of all urban area trips. It is important to remember that buses serve about 70 percent of all public transit riders--in most cities providing the only public service available. Adequate highways are important to bus transportation. We are not opposed to sound public investments in public transit, but we are opposed to making these investments at the expense of the highway system.

Instead of the current campaign to downgrade support for the highway system, what we actually need is greater support. All available data and reasonable projections indicate an increased use of highways in the future, a need to upgrade existing highways, and a continuing and increasing safety problem. Even more serious is the fact that we now are experiencing the buildup of a deferred maintenance problem with the highway system that in a few years will be similar to that involved in the current railroad crisis. According to the Federal Highway Administration, our highway system is deteriorating at a rate nearly 50 percent faster than we are rebuilding it. In other words, we are not even protecting the massive investment we have made in the past. Since 1967, due mostly to inflation created by unwise fiscal policies of the federal government, the cost of building, rebuilding, and maintaining highways and bridges has more than doubled, and federal highway aid authorizations--not to mention appropriations--effectively have been cut in half. Unless resolute action is taken by the Congress and by the various state and local governments, our highway system will soon be reduced to the sorry status of the bankrupt railroads.

It is ironic that many in and outside the Congress are calling for the government to own and operate the railroad system--pointing to the fact that the public already owns the highways, airports, and waterways--at a time when based on what is currently happening to the highways, it is clear that public ownership in no way guarantees that an adequate system would be provided or maintained.

The Rural Highway Situation

Until recent months, we have not had available very much detailed information on the rural highway situation. This has been partly due to a general confusion as to what people mean by rural roads; it is also due to the fact that rural America has too often been relegated to a back seat in terms of public concern and attention.

Fortunately, various committees of Congress have helped to remedy the fact shortage. The Senate Committee on Agriculture and Forestry has published "The Immovable Feast" and "Transportation in Rural America," and the House Select Committee on Small Business has published a report on "Problems Involved in the Marketing of Grain and other Commodities." These reports have provided us with badly needed data.

As of 1972, the rural road system, including all roads outside populated areas of more than 5,000 people, accounted for 3.2 million miles of the 3.8 million miles of roads and streets in the country. Some 2.3 million miles of these rural roads were under local control; state-owned roads accounted for 0.7 million miles; those under federal control, 0.2 million. Of this highway mileage in rural areas--more than 80 percent of the total highway system--a fourth is unsurfaced, and about half is soil, gravel, or stone-surfaced. The Interstate Highway System, if totally completed, will represent a total of 42,500 miles--a small part of the total rural system, it is expected to carry about 20 percent of the traffic. The question that concerns us is what is going to happen to the other 80 percent?

In a recent report to Congress, the Economic Research Service of the U.S. Department of Agriculture stated: "The recent crisis in transporting grain and soybeans, the general decline in railroad facilities and service, and the mobility problems of rural people have all caused concern that the rural transport system is in serious trouble, and that transportation problems will prevent the full use of agricultural resources and inhibit rural development..."

The states, under guidelines provided by the Department of Transportation, have classified the road system according to the principal service provided. These functional classes--which include arterial, collector, and local roads--are useful in evaluating the adequacy of the road network. As we understand the definitions, the arterials include the Interstate System as well as other principal and minor arterials. The collector system is subdivided into major and minor collectors.

It helps to visualize the situation when we realize that the principal arterial roads, including the Interstate System, total 0.1 million miles, and account for only four percent of the total rural road system. These roads are designed to provide for high-volume state-wide and interstate travel by connecting the larger urban areas. They carry about 70 percent of all rural traffic. The collector system, totals 0.7 million miles, or 24 percent of total rural roads. These roads are primarily used for in-county and other short trips. Often, the collectors connect local shipping and receiving points in rural and agricultural areas to county seats or other nearby trade centers. Local roads, the most extensive network in rural areas, provide access to adjacent land and accommodate short-distance travel. They total approximately two million miles.

Under the DOT guidelines, the States have rated the various segments of the highway network in terms of adequacy for mobility and safety to meet 1970 needs. More than three-fifths of all arterial and collector roads were identified as deficient. Although the percentage of collector roads rated deficient was about the same as for arterials, collector mileage was about two and a half times as great. These deficiencies were great not only in the Appalachian region where agricultural traffic is of relatively less importance but also in major agricultural areas such as the Corn Belt. The deficiencies are due to inadequate surface, inadequate foundation, inadequate width, and unsafe design. More than half of the local roads were similarly rated as inadequate or intolerable.

The Bridge Situation

All available facts indicate that the most serious aspect of the rural highway situation lies in the inadequate and dangerous obsolescence of bridges.

The national bridge inspection program, now 90 percent complete, shows that of 230,000 bridges on the federal-aid systems (totaling about 25 percent of all mileage), about 32,500 are deficient, including 7,000 that are dangerously weak. Another 46,000 bridges are rapidly becoming obsolete for increasing traffic volumes and heavier loads. The number of deficient bridges on rural roads poses a serious restriction to the continuing flow of traffic along these routes. There are approximately 200,000 bridges on arterial and collector roads that are expected to remain rural through 1990. Over two-thirds of these are on rural collectors. We have no reliable data available on how many deficient bridges are located outside the federal-aid system; but, in all likelihood, this number is as great or greater than that for the federal-aid portion of the system.

Agricultural Freight

American agriculture is heavily dependent upon a modern, efficient, and adequate transportation system. While all forms of transportation are used by agriculture in acquiring necessary production supplies and in shipping farm products to market, the highway system is by far the most basic.

Transportation by truck has become increasingly important to the agricultural industry. Trucks used mainly on farms for agricultural purposes increased from about 3.5 million in 1963, to 4.3 million in 1972, and represented some 22 percent of all trucks in the latter year. Trucks now haul 73 percent of all fresh fruits and vegetables, 99 percent of cattle and calves, 100 percent of the hogs, and 98 percent of the sheep and lambs shipped to market. Extensive data are not available, but we know that farmers are far more dependent than ever before on trucks for the movement of needed production supplies as well as for getting their produce to market. Farmers will continue to need a multi-modal, balanced transportation system, but truck transport by highways will continue to be the most important segment of the total system. Considering projected increases in food production to supply the needs of our own people, plus expanding exports of agricultural products, and the deterioration of railroad service, the nation's farmers are beginning to question whether the rural highway system will be in a condition to get the necessary production supplies to the farms and get food and other agricultural products from the farms to consumers. The cost of transportation already is a major factor in the cost of food and will become an even greater factor if the highway system is allowed to deteriorate further.

What has happened is that during the past twenty years, our attention has been focused more and more on the Interstate System and on traffic congestion in the urban areas; and we have neglected the non-Interstate rural highway system. This neglect needs to be ended.

Recommendations

The President has proposed legislation that would, in our opinion, spell the beginning of the end for the Highway Trust Fund and a further shift away from adequate support for the highway transportation system.

As we understand the proposal, the President would leave only one cent of the four-cent federal gasoline tax in the dedicated fund, shifting two cents to the general treasury and permitting the states to pick up one cent. The four-cent diesel tax would stay in the Fund, along with the various excise taxes now dedicated to it. The reduced Fund would be used exclusively to complete the Interstate system. This means, of course, that the non-Interstate portion of federal aid to local highways would come not from the dedicated Fund but from general appropriations.

We cannot support this proposal. We think the Fund should be fully maintained to complete the Interstate System and then devoted to other highway transportation needs, particularly in the non-Interstate rural system.

The users of the highways in this country have been paying user charges in the form of taxes to pay a major share of the cost of the system. They are willing to continue paying for the system, but they are not willing to have these taxes diverted to non-highway needs. We support the concept of using highway-user taxes for building and maintaining highway and highway-related services, keeping in mind that buses use highways and that rail transit systems need parking facilities at collector points. All available data indicate that, even if we maintain the Fund with the present sources of revenue, it will not be sufficient to meet the needs of the present level of federal participation in the highway system. We do not advocate a federal takeover of the nation's highway system. On the contrary, we strongly believe in as much state and local control as feasible; but we see a continuing role for the federal government. We believe the historical federal-state cooperation in this program has been commendable and should be continued.

In light of the energy situation, the deteriorating railroad situation, and the serious problems now existing with the rural highway system, we believe the Congress needs to give further consideration to steps that will (1) encourage state and local jurisdictions to redirect attention to the rural highway system; and (2) develop an expanded bridge replacement program, using the Trust Fund revenues.

We believe that these recommendations not only are in the best interests of farmers and a growing rural America but also in the best interests of consumers, who have a vital stake in what happens to the agricultural industry in this country and to the adequacy of the transportation system needed to serve that industry. It is necessary that the Congress consider the real-life needs of the great majority of people in this country who want to continue to use their automobiles and who need the highway system to move people and the goods of commerce.

We appreciate the opportunity to present our views.

Senator RANDOLPH. I think I recall some words from an old verse, "the doctor heals and the lawyer pleads, and the miner follows precious leads. But this or that, whatever befall, the farmer, he feeds them all." That is what you are saying?

Mr. FIELDS. That is correct.

Senator RANDOLPH. You are saying the products of the farm and the field, those have to be moved to people; people in cities.

Mr. FIELDS. That is exactly right. Of course, we in agriculture need a multimodal transportation system, but the highway is still the key. It is still the central core of the system that we need.

Let me also add, Senator, this is no longer just important to the consumers in this country, but with the scope of agricultural exports and world trade that we are now involved in, this is the most important country in the world in feeding hungry people here and abroad, this transportation system is essential also to move these commodities, these food commodities abroad.

Senator RANDOLPH. I believe the record, Mr. Chairman, would be correct. I think these figures, I recall them, in fiscal 1976 we authorized \$1,250 million. That is the authorization. That is primary and secondary roads.

Then we would add \$33 million in our forests highways, then we would add \$16 million for public land highways and \$50 million for rural public transportation.

The administration, I think, is recommending \$1.5 billion for all of these programs.

That would add up to \$1.349 billion. I am not sure, Mr. Coupal, what would you comment on that listing of figures and priorities?

Mr. COUPAL. Senator, again, the administration's bill reflects our best estimate of the tradeoff between the great needs that we recognize in all highway systems, including the rural system, and the economic situation that we face today.

Furthermore, in addition to that, it also reflects, it seems to me, the philosophy that we are trying, even though we recognize there are great needs of the highway system, to put some of the decisionmaking process and authority back at the State and local level.

So that while there may be greater needs, it is not necessarily true that these needs must be met by Federal expenditure. Some of these may need to be met by State and local expenditure.

We have attempted to put both authority and responsibility back to the State and local level for those decisions that we feel are appropriate State and local decisions.

Senator RANDOLPH. Mr. DeBerry, I think perhaps you would wish to help us in this discussion.

STATEMENT OF LUTHER DeBERRY, STATE HIGHWAY ENGINEER, STATE OF TEXAS

Mr. DeBERRY. Thank you, Senator. Of course, I think the additional load that the loss of railroad has put on our rural system has increased a tremendous amount and it is very important that this system continue to be maintained, rehabilitated. I do not think we need a tremendous amount of new mileage or anything like that.

But we do need rehabilitation of our system, particularly in the secondary and primary system. We need to complete the interstate. We have neglected to a certain extent the maintenance of the systems trying to finish the interstate.

We need to finish those gaps in the Interstate System. It is very important that the secondary system and the primary system be developed to handle the food and fiber, to carry them to the market. There is nothing that is produced that doesn't have some form of transportation on it, I mean some part of its transportation on the highway system and food transportation system affects the economy of this country.

It must be maintained at a high level. I agree with the majority of the testimony that has been made here today. There are a great many problems in our rural transportation, both highway transportation, and public mass transportation.

I would hope that we could continue to keep free enterprise in the mass transportation business as long as we could in some form. We have a real problem in the increase in prices, as I believe Dr. Michael and Mr. Johnson stated.

The cost of maintenance is going up. The percentage of funds available for rehabilitation is decreasing and as long as you stay on the same dollar value to the highway facilities, it will not be many years until it will be only maintenance.

Of course, I think we have a tremendous unmet need on the rural highway system in the United States, both roadway and bridge systems. The welfare of all Americans, urban and rural, is heavily dependent upon the condition of this system.

Traditionally, in this country we have had a Federal, State and local chain of command, you might say, in developing the best transportation system in the world. I really cannot see any reason to change that type of system.

I think our mobility is directly related to our high standard of living and vice versa, and we must maintain an adequate transportation system in order to maintain a high standard of living in this country.

Senator RANDOLPH. Thank you, Mr. DeBerry. I am going to be provincial for a moment with Senator Stafford. Vermont is the most rural State. West Virginia is the second to Vermont.

I am not sure that order is correct, but it has been used.

Senator STAFFORD. It means in Vermont a metropolis is anything more than 3,000 people, Mr. Chairman.

Senator RANDOLPH. I am thinking of a Vermont that I am not as familiar with as I should like to be, but you have beautiful countryside and hearty people.

Generally, we associate both of those with Vermont.

What is the picture from the standpoint of the products, food and fiber, that Mr. DeBerry is mentioning? How do they reach the ultimate consumer, Senator Stafford?

Senator STAFFORD. Mr. Chairman, the movement of food and fiber in Vermont is largely dependent in the first instance on how well the rural roads are functioning.

We had a major program years ago, back when I was the Governor of the State, to hard surface all of the rural roads which were actually the key to getting the produce of our farms to larger roads where heavier trucks and railroads could carry the products to Boston and other markets.

Senator RANDOLPH. Then the movement of those products from the farm to the ultimate market has been on some type of road?

Senator STAFFORD. That is right, Mr. Chairman.

Senator RANDOLPH. The rail could not really solve that problem?

Senator STAFFORD. The rail in Vermont certainly could not reach even 20 years ago when they were more active, the large numbers of farms in our small valleys that were principally dairy farms producing milk.

That had to travel by a small tanker to a large tanker to Boston or New York to get there. So major roads are important, but so are the rural ones.

Senator RANDOLPH. Thank you.

I think the same comment could be made in West Virginia. We cannot rely to a great degree on our rail transportation, that which is available. I remember so well in the days of my youth when we had our cattle and our sheep and, to some degree, our hogs.

These were never shipped by truck. These went by train. They moved, I suppose 80 percent over largely the Baltimore & Ohio Railroad, and our markets were Jersey City and Baltimore.

I have often ridden the caboose, very frankly, on those trains because my father was a shipper of cattle from the lands. Now it is different, as the Senator knows, who is presiding. The trucks move the steers and the lambs to market, places like Lancaster, Pa., which back in those days was only a local situation.

Now much stock is moved from West Virginia into Lancaster, but increasingly the picture has been changed by the stockyards in the various counties of the State where the sales are made.

So it is a different system. I don't know what it is in Texas, of course, but Mr. Chairman, what we were discussing was the movement of food and fiber and farm products to the markets and the importance of our rural roads as well as our interstate roads in the movements of those products.

I do not want to use the time unnecessarily, Mr. Chairman, but I wonder would someone else want to comment on this general situation?

Mr. FIELDS. Senator, I would join you in your provinciality since I was born and raised on a farm in Roane County, W. Va. I was back in West Virginia when we had the program to get rid of some of the mud. I lived on one of those mud roads. So I know what you are talking about.

Senator RANDOLPH. You are talking about Roane County. That is the county seat of Spencer. That was listed as an all America city this year, by the way, in competition with larger cities.

Mr. FIELDS. Senator, let me say that along the line of what you were saying that even if we look at the heartland of America where the great bulk of agricultural commodities have to come from, not to belittle Vermont or West Virginia, but even in the Midwest and in the Corn Belt we have serious deficiencies, particularly in the bridge situation.

It is very important that we keep our eye on this ball that we are headed for real trouble in moving the necessary supplies to the major farming areas in this country and of getting those commodities back out in any kind of economical fashion if we allow the present trend to continue.

Senator STAFFORD. Mr. Chairman, I think Mr. Johnson wanted to comment.

Mr. JOHNSON. Thank you. I think one of the things when we are talking about the funding situation and putting the administration proposal of 2 cents going into the general fund and then maybe coming back to transportation, one of the things we need to consider is the leadtime on projects running somewhere between 3 and 10 years from the time of its inception until the time they are opened.

Without knowing how you can budget 4 or 5 years down the pike, you really have no idea what kind of a program you can be working on. It was pointed out here that our funds are not increasing at any great rate.

We are tied to a cent per gallon tax. The gallons are not going up very fast. The prices are going up rapidly. But this, coupled with taking part of that money and putting it into some other fund, certainly is not going to start solving the problems, particularly the bridge problem.

We have a whole series of farms in our particular county that can not pass with anything greater than the gross load of 9 tons at the moment. We are attempting to get everybody on a 9-ton gross load road. That is not a very big load coming out of a farm.

Senator STAFFORD. Thank you, sir.

Senator RANDOLPH. Mr. Chairman, again I appreciate—I know, as Senator Bentsen does—your attention to these hearings; for the record, those of you who would care to comment and give us your views of how much authorization should be available for rural highway systems and related programs.

Perhaps there are some that might help us in this way. Mr. Michael, Mr. Johnson, I know you have indicated your feeling about the problems, the very grave problems with regard to the deficient bridges in, let's say, Iowa and Indiana.

This is a national picture. Yet, the administration proposes to really give us not what we think we need and instead placed a 30-percent ceiling on funds that can be used for bridges out of the safety assistance program.

I doubt if that is sufficient. I think we need a special program for bridge reconstruction and repair.

Perhaps the panel has some feeling about the funding ceiling or at least amounts that you think are needed.

Mr. JOHNSON. I don't know if I am prepared to comment on an amount, but I did make a comment earlier that the categorical moneys are always a problem. I did point out that there are a few counties, for instance, that have concentrated on bridges and have built bridges to the exclusion of building roads and do not really have a bridge problem.

The categorical moneys penalize these people. The money very definitely is needed for bridges in most counties, but if the money would go through the present system and let the local officials decide whether their bridge problem is greater than their road problem, I think it would be more efficiently utilized.

Mr. COUPAL. Mr. Chairman, may I comment on that? May I point out that the administration bill does precisely that. It gives the flexibility to the States to use any of their RTHP money on bridges, and up to 30 percent of the \$400 million safety fund.

It is exactly that objective that we are trying to achieve; greater flexibility in the use of these funds by the State and county and local officials.

Mr. MICHAEL. Mr. Chairman, in this regard, although there is some flexibility built into the system and perhaps with the seriousness of the other needs in the category of safety only 30 percent can be spent, perhaps that is necessary.

I think, as I said earlier, the real problem is totally insufficient funds for the rural roads. You asked for a figure. You indicated that for the past year something like \$1.4 billion was obtained when you totaled everything. With the increase in costs, to maintain the same level of road improvements would require something in the neighborhood of \$2 billion now.

I would say somewhere between \$1.5 and \$2 billion is the minimum we ought to be thinking about as far as the rural system is concerned.

Senator RANDOLPH. I think, you are realistic. I think it would be \$2 billion.

Senator STAFFORD. Dr. Michael, on that same point, has some projection been undertaken in connection with highway wear for all of our systems as a result of the obvious trend now towards smaller and lighter automobiles? Has that been taken into consideration?

Mr. MICHAEL. Certainly one would suspect there might be some less wear as far as our roads are concerned with some lighter vehicles. I would like to point out that these are automobiles and a great deal of the wear comes from heavier vehicles which are not getting lighter but are getting heavier. This is one of the conditions I called attention to earlier.

Senator STAFFORD. Thank you.

The acting chairman is also very happy that the chairman of this subcommittee, the distinguished Senator from Texas, Lloyd Bentsen, is here. He had several other important commitments this morning.

Senator Bentsen, the floor is yours.

Senator BENTSEN. Thank you very much. I have been over in the Finance Committee working on the energy bill. Hopefully, we will have some gasoline for those trucks to run with.

Let me ask Mr. DeBerry something about the roads. We have a great farm to market roads system in Texas, one of the best I have seen anywhere in the country.

I want to quickly say that I was born and reared on a farm, too, down in south Texas. I guess the term is born and jerked up on a farm. But is the problem really one of new, paved farm to market roads, or is it more one of maintenance and repair of bridges? If you had to choose between the two, which is the most pressing need?

Mr. DEBERRY. Senator, I think the pressing need, in Texas we have over 40,000 miles of paved farm to market roads. But the pressing need is funds for rehabilitation of these systems and bridge replacement.

Of course, we advocate that in the financing that the categories be reduced and the maximum flexibility be given to the State and local government so we will not be penalized to use it all for bridges or depending upon the existing condition at the time.

Senator BENTSEN. Do I understand, then, that you favor the administration's proposal to drop bridges into a separate category, try to get them into a broader category, or not?

Mr. DEBERRY. I believe what I would favor would be to list those items but not specifically say they are x number of dollars for each category. Use a little more flexibility in going from bridges to rehabilitation, depending upon what the actual needs in the specific area are. I think when you get back to the item of total funding for the rural roads that Senator Randolph brought up a minute ago, the cost increase alone would require you to nearly double the amount of funds we have had in the past because of the increase in prices.

Senator BENTSEN. Mr. Johnson, you objected, as I understand it, to a separate category to fund roads off the Federal system. I would like to ask is your objection to those Federal funds being used for all system roads in general, or do you just oppose a separate category for them?

Mr. JOHNSON. The category of the off-system has generated a whole new batch of rules and regulations which are very, very similar to our on-system, to our FAS rural. They have just recently come out with these.

So far, we have not been able to obtain any of these moneys. We think we are going to be able to shortly. But by the time that amount of money boiled down to an individual county we are going to be looking for a very, very small project upon which to spend that money.

It is not any amount that you can replace a relatively medium sized bridge for instance. There won't be enough in the individual county.

Categorizing that money sometimes creates problems in trying to spend it efficiently. Many times it creates these kinds of problems, in fact.

The fact that the proposal or the present law actually is to eliminate the minor collectors from the FAS system, then we turn around and find them as off-system, I think is kind of a reverse.

If we leave the minor collector system in the FAS system and then fund the FAS only, I think that we would be far better off and let the local jurisdiction take care of the off-system. I am concerned about redtape, also.

Senator BENTSEN. We had some testimony before us about putting down some of the environmental impact statement jurisdiction more at the local level. We need the statement and that sort of thing, but when we get to the redtape, trying to do some expediting there, I assume you favor that; do you?

Mr. JOHNSON. Yes. The question is strictly a local job, a reconstruction job where maybe you need an additional 2, 3, or 5 feet of right-of-way in order to build the road to the present standard. It takes under the FAS regulations the opportunity for hearing and all of the stuff to buy this little sliver along a rural road.

You go through all of these processes which I don't feel are necessary on that type of a reconstruction job. For relocation, yes, that is something different.

Senator BENTSEN. Professor Saltzman and Dr. Michael, it appears that if I understand the inference there, that the transit is not really a matter for the Federal Government, if that is the case, if I correctly interpreted it.

From your experience, do you think the States and localities have the needs and the will to have reliable rural transit systems?

Mr. SALTZMAN. It is my opinion that unless the Federal Government creates a separate category for rural public transportation, let me refer directly to the administration's bill where they allowed some flexibility in the rural transportation fund, that there will be little spent in public transportation in rural areas because of the very important and demanding needs of the road system and the relatively few people who need rural transit.

Therefore we have seen the National Mass Transportation Act having a nonurbanized area fund for public transportation in the nonurbanized areas. I think that is a very important bill.

Let me note again that Senator Williams' amendment to S. 662 would change the National Mass Transportation Assistance Act to allow for operating subsidies in the nonurbanized areas. I think that it is very important to enact that amendment.

Especially because the transportation disadvantaged the elderly, handicapped and poor persons have less access in rural areas. You need the operating assistance provisions in the nonurbanized areas more than the urbanized areas.

In fact, as it is currently worded the proposed amendment would make only one-half the money available for operating assistance. I would suggest that at the local option, all the funds be available for operating assistance.

Getting back to the earlier point you mentioned, about whether there is the will out there. I believe that the States and localities will provide rural public transportation only if there is some Federal impetus to make these funds available.

Rural transit funds should be included in the Mass Transportation Act or you are doing them a disservice in comparison with the urban Areas.

Senator BENTSEN. I have no further questions.

Senator STAFFORD. Thank you, Senator Bentsen.

Gentlemen, in behalf of the subcommittee, I want to express my personal and the subcommittee's appreciation for your appearance here and your assistance to us in the task of writing a highway bill that will be effective and realistic.

The Chair has a number of questions, but in view of the hour, the Chair is going to solicit your cooperation. It is the Chair's intention to send the questions to you in the hope that you will respond to them in writing.

We would appreciate an early response so that they can be incorporated in the record that we are compiling.

So with that understanding, unless there is some objection from some member present or someone has not said something he wishes to say, the Chair will adjourn this meeting, subject to call of the Chair.

[Whereupon, at 12 o'clock noon, the subcommittee recessed, to reconvene Thursday, July 24, 1975.]

[Responses to questions from Senator Stafford and a statement from the National Grange follow:]



1735 new york avenue, n.w., washington, d.c. 20006

(202) 785-9577

July 30, 1975

The Honorable Robert Stafford
United States Senate
Committee on Public Works
Washington, D. C. 20510

Dear Senator Stafford:

Enclosed is the reply of Mr. M. L. Johnson, National Association of County Engineers, to the questions for which you requested written response. We hope this will be useful in your further consideration of the many critical problems in rural transportation.

Please let me know if you have any further questions which I may pass on to Mr. Johnson.

Sincerely,

Sandy Spence
Legislative Representative

RESPONSES FROM MR. M.L. JOHNSON
NATIONAL ASSOCIATION OF COUNTY ENGINEERS

QUESTION

1. I know that there is much dissatisfaction with the redefinition of routes eligible for inclusion on the Federal-aid Secondary System. It would appear to me that so long as the total Federal-State-County investment in roads stays the same, it is not important that a road be on a Federal-aid system. Could you explain why the counties object to having routes taken off the Secondary System?

ANSWER

1. Counties object to having routes taken off the Secondary System because of limited programming flexibility for major and minor collectors under the functional classification set forth in the 1973 Federal Aid Highway Act.

As further explanation of the issues involved, I would like to transmit the testimony of Earl Rogers, given before the House Surface Transportation Subcommittee on July 28. Rogers' testimony represents his viewpoint and that of Michigan. It is not official NACE policy; however, it may be useful to you because it does outline the programming difficulties of the rural secondary system, the increasing needs of that system and the threat of decreased funding of these essential roads.

QUESTION

2. What is your reaction to the idea of turning back 3¢ of the gasoline tax and the whole responsibility for the ABCD systems to the States?

ANSWER

2. As my prepared statement indicated, NACE has not taken a specific position on financing arrangements for the highway program. Generally, as an organization, we associate ourselves with the position taken by the National Association of Counties. That position does call for return of 3¢ to the states for transportation purposes. As presented to the Subcommittee on July 24, the NACo position calls for retention of certain basic responsibilities by the Federal government. That section of the NACo testimony is reproduced and attached.

QUESTION

3. Is the primary reason you believe the Federal government should be involved in the highway program because the Federal treasury can supply needed funds or are there other functions which justify a continued Federal presence?

ANSWER

3. I believe that the NACo position as mentioned in (2) above answers this question as well. I would emphasize the need for a federal presence: (1) to assure that highway user revenues are used for transportation purposes; (2) to provide for assured continuity of funding over sufficient time to permit long-term planning and financial arrangements required by highway construction; and (3) to meet the need for broad national policy and very general standards for our nation's major highway systems.

Responses from Mr. Johnson
National Association of County Engineers
Page Two

QUESTION

4. You have objected to the change in Federal law permitting heavier trucks to use the Interstate System because these heavier trucks will eventually end up on local rural roads. In your opinion is there any way to have a two-tiered system with one set of weights for high grade highways and another for lower grade roads?

ANSWER

4. There is no way to have a two-tiered system with differing sets of weights for different types of highways because almost nothing is loaded and unloaded directly on the Interstate System.

QUESTION

5. How effective is enforcement of truck weight limits, as far as you know?

ANSWER

5. To the best of my knowledge, the enforcement of truck weight limits is not too stringent in some areas with which I am personally familiar.

QUESTION

6. Would you support extending the Federal maximum weight to all Federal-aid systems, not just the Interstate?

ANSWER

6. No. As I indicated in my prepared statement, the heavier weights permitted under the 1974 Federal Aid Highway Act Amendments will cause stress and deterioration on the non-Interstate systems. Since a two-tier weight system is not feasible, I would prefer to see weight limits for Interstates reduced.

QUESTION

7. In your opinion, should Federal funds be made available for bridge replacement as a separate category of funding?

ANSWER

7. In my formal comments to the Subcommittee, I stated that bridge repair and replacement is an extremely critical problem in many areas. However, some individual counties and some states have already given top priority to bridge replacement. They do not face the same degree of urgency for this type of program as do others. Furthermore, when new categories of funds are established, there are generally insufficient funds provided to allow for any significant projects. For these reasons, we would prefer that sufficient total highway funds be made available to enable state and local officials to make their own priority determinations.

Mr. M.L. Johnson
National Association of County Engineers
Page Three

QUESTION

8. What would you think of a Federal program which made funds available only for bridge replacements and possibly other safety-related construction, leaving states and counties with sole responsibility for other types of construction?

ANSWER

8. As stated in response to questions above, we would prefer increased reliance on state and local government for highway construction under broad national policy guidance and standards, with funding provided by return of 3c from federal gasoline tax revenues. If the Congress wishes to establish a special highway safety bridge reconstruction program funded out of general revenues, we would be pleased to assist in documenting the need for such a program.

QUESTION

9. You have said Federal funds should not be used for maintenance. If one of the most costly elements of providing a functioning road system in some states is removing snow during several months of the year, would you say a state should not be able to use its Federal apportionments to perform this task?

ANSWER

9. We believe that redefinition of the term "construction" to allow for reconstruction, resurfacing and upgrading of existing roads would be sufficient. To extend authority to use of Federal funds for any form of maintenance such as grass cutting or snow removal would involve all the additional paperwork which automatically follows federal funds. The additional paperwork cost would not justify the use of such federal funds for snow removal.

THE FEDERAL ROLE UNDER NACo PROPOSAL

The question arises, if three cents is returned to state and local government, what legitimate role is left to the Federal Government in the further development and maintenance of our national transportation system?

As already stated, we believe the Federal Government should continue its efficient service as tax collector for revenues to be returned to state and local government.

We believe the Federal Government should continue its leadership in the joint preparation, with state and local assistance, of the national functional classification study to establish a primary system comprising major highways (including the Interstate) in both rural and urban areas, a secondary system comprising collector roads in rural areas, and an urban system comprising collector streets in urban areas. It would be these systems which would be part of our overall national highway system on which revenues from the three cent gasoline tax could be spent. These systems would also provide a basis for establishment of broad national goals for assurance of an equitable split by states of funding between urban and rural areas.

We believe that Congress should establish broad national policy under which the Federal Government should develop broad-brush procedural guidelines and general post-audit compliance procedures. Under such a system, state and local governments could comply with national policy and federal requirements without the current project-by-project review and second guessing of state and local priorities by federal bureaucrats.

We believe the Federal Government should develop a meaningful procedure for certification and acceptance of state, city and/or county standards and requirements for purposes of meeting all facets of federal requirements, including environmental reviews, prevailing wage requirements and equal employment opportunity requirements, where such state and local laws and procedures are equal to or greater than federal requirements.^{1/}

Other areas of appropriate concern to the Federal Government would include such activities as: coordination of highways with other modes of transportation to achieve the most efficient balance of transportation systems and facilities; special efforts to achieve national social and economic development goals through basic transportation systems, such as the Appalachian development corridor system and the national demonstration economic growth center development corridors; scientific advancement through direct research and development and the creation of a systematic process for implementing the results of R and D efforts undertaken by state and local governments, universities, and private organizations; and planning and coordination to assure appropriate interface of highways at state lines and resolution of similar inter-state issues.

^{1/} In this regard, NACo has urged that local government should work with the new nationwide "Commission on Federal Paperwork" established pursuant to HR 16424 in pursuit of more streamlined administrative procedures for operation of all federal programs.



INSTITUTE / TRAFFIC ENGINEERS

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Please Reply:

Civil Engineering Building
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W. Lafayette, Indiana 47907
August 4, 1975

Senator Robert T. Stafford
Senate Committee on Public Works
Room 4200, Dirksen Senate Office Building
Washington, D. C. 20510
Attn: Kathy Cudlipp

Dear Senator Stafford:

Attached are my answers to the questions you forwarded on July 21 relative to my testimony at the hearings on Rural Transportation. It was my pleasure to prepare the testimony and these answers and I would be pleased to comment on any other questions you or members of the Committee might have.

Sincerely,

Harold L. Michael
Harold L. Michael
President

HLM:ms

cc: K. H. Layer
D. W. Gwynn
L. A. Dondanville
W. R. McGrath
L. E. Keefer

Answers to Questions on Rural Transportation
Posed by Committee Letter of July 21, 1975

by

Harold L. Michael
President, Institute of Traffic Engineers

1. On pages 15 and 16 of your written statement you refer to two types of maintenance. I am not clear as to what role you would have the Federal government play with respect to either. Could you explain your position?

It is clear that much maintenance of both types - that of the pavement, shoulders, structures and roadsides and that of operational and safety devices - is very important to the future of highway transportation. In my opinion, maintenance is the most important of all transportation needs at this time. There must be adequate funding for all maintenance on all highways and this must be greater funding than that which has been available for this task in recent years. Maintenance of the type which must be performed continuously or has a life of say two years or less, such as patching, mowing, line painting, etc. should remain the total responsibility of the unit of government which has responsibility for the road. Maintenance of the type which has a life of several years, major resurfacing, signal modernization, large signs replacement, etc. should be eligible for Federal Aid.

2. What is your reaction to the idea of turning back 3¢ of the gasoline tax and the whole responsibility for the ABCD systems to the States?

Turning back of the full 3¢ of the gasoline tax which is proposed to not continue into the Highway Trust Fund to the states for their use and full responsibility for the ABCD Systems in my opinion would be a wise move. This would make more funds available for use on the road to many state and local governments, minimize the red tape in its utilization and secure a better highway system. All states and many county and city governments have adequate professional staff to maintain high standards of highway development without federal supervision.

3. Is the primary reason you believe the Federal government should be involved in the highway program because the Federal treasury can supply needed funds or are there other functions which justify a continued Federal presence?

The primary reasons that the Federal government should be involved in the highway program are twofold:

1. To insure that interstate coordination and standards are optimal for development of interstate highways (This is more than just the Interstate System).
2. To insure that highways of all classes important to the defense, development and economy of an area and of the nation, especially in the developing stages of an area, are adequately developed and maintained even though adequate state or local funds are not available.

The development of the Interstate System and of adequate highway departments in each state as of 1975 have minimized continued Federal participation because of the first reason given, except for completion of necessary segments of the Interstate System. The second reason given, however, obviously exists for some areas of the country and for some types of highway development and maintenance.

4. You have objected to the change in Federal law permitting heavier trucks to use the Interstate System because these heavier trucks will eventually end up on local rural roads. In your opinion is there any way to have a two-tiered system with one set of weights for high grade highways and another for lower grade roads?

In my opinion, a two-tiered system of weights is not feasible without much greater enforcement than is now conducted. The amount of enforcement which would be necessary would exceed in costs any benefits obtained. Furthermore the aggravation and hostility created by such enforcement would be considerable.

5. How effective is enforcement of truck weight limits, as far as you know?

Enforcement of truck weight limits is very poor. The difficulty of current techniques of portable measurement of weights so as to surprise the overweight truck and the ease of communication between trucks makes enforcement almost impossible. Furthermore it actually drives overweight vehicles onto lower standard roads. Most overweight truck drivers are aware of their overweight condition and obviously will avoid being caught if at all possible.

6. Would you support extending the Federal maximum weight to all Federal-aid systems, not just the Interstate?

As stated in our testimony, we believe that the current Federal maximum weight limits as approved in December 1974 as a provision of the Highway Act were not in the interests of the nation and we do not support its extension to all Federal Aid Systems. Many of the highways in the other Federal Aid Systems in many areas of the nation are not capable of handling current Federal maximum weights without suffering severe damage. This would also increase the probability of such heavy loads travelling on local roads which rarely can handle such loads.

7. In your opinion, should Federal funds be made available for bridge replacement as a separate category of funding?

Because of the facts that bridge replacement is such a current important need and the impossibility of many responsible units of government handling this need within a reasonable span of years, I believe it important to have considerable federal funding for bridge replacement on all classes of highway as a separate category. Such funding, however, should not be so restricted so as to require a unit of government to spend certain funds for bridge replacement if it has minor needs in this area, as some units because of topography, climate and other factors find themselves. Some flexibility therefore is needed in a separate category funding plan.

8. What would you think of a Federal program which made funds available only for bridge replacements and possibly other safety-related construction, leaving States and counties with sole responsibility for other types of construction?

If the 3¢ gasoline tax proposed for not going to the Highway Trust Fund would be returned to the states and if the Federal program included completion of all important sections of the Interstate System within a reasonable period of years, I would favor a Federal program which included additionally only funds for bridge replacement and safety-related improvements. As stated earlier, this would make more funds available for use on highways in many states and reduce the amount of funds now lost in red tape and time. I am confident States and other units of local government would be better able to handle their local highway needs under such a program and would do it in a quality way. This sort of a program, in my opinion, would be better than the one referred to in Question 2. Bridge replacement and safety-related improvements because of their severe needs require inclusion in a Federal highway program.

Harold L. Michael
President, Institute of
Traffic Engineers

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

PRESIDENT

William S. Ritchie, Jr.
Commissioner of Highways
West Virginia Department of Highways
1900 Washington Street, East
Charleston, West Virginia 25305



EXECUTIVE DIRECTOR

Henrik E. Szlachet
341 Nat'l Press Bldg.
Washington, D. C. 20004
Telephone 628-2438

August 5, 1975

The Honorable Robert T. Stafford
5215 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Stafford:

Enclosed please find responses to the questions you transmitted to us on July 21, 1975 at the close of the hearing on Rural Transportation.

1. What is your reaction to the idea of turning back 3c of the gasoline tax and the whole responsibility for the ABCD systems to the States?

ANSWER: AASHTO has no formal policy on the return of 3c of the gasoline tax to the States.

Although some State officials would welcome relief from red tape imposed by Federal requirements, others see serious problems in the return of 3c to the States including the following:

a. Some States, which are donee States, would not be able to generate sufficient revenues by raising their taxes by 3c to offset the loss of Federal apportionments. In 1974, 23 States were donee States with 14 receiving apportionments which were at least 1.25 times the amount of their payments into the trust fund. Most of these States are rural States with long stretches of road with relatively small populations, and would find it most difficult to support an adequate highway program for the benefit of interstate travelers without Federal assistance.

b. State constitutions and laws dictate the apportionment of gasoline taxes in all but 5 States. Some require that a portion of the tax be devoted to non-transportation purposes. For instance, The Constitution of my own State of Texas requires 25 percent of any gasoline tax to be devoted to education.

c. By turning the 3c tax back to the States, the Federal government would lose the leverage it now has in requiring States to provide matching funds to assure that a given outlay of Federal funds will result in an even larger expenditure for transportation projects.

Senator Robert Stafford
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August 5, 1975

2. How effective is enforcement of truck weight limits, as far as you know?

ANSWER: We believe that the enforcement of truck weight limits has been quite effective. We are concerned, however, about provisions in Federal regulations which require States to report on the enforcement methods in addition to certifying that the weight limits are being enforced. Some States have difficulty in controlling the enforcement of weights done by local officials with exclusive authority within their jurisdictions.

3. Would you support extending the Federal maximum weight to all Federal-aid systems, not just the Interstate?

ANSWER: AASHTO has adopted a Recommended Policy on Maximum Dimensions and Weights of Motor Vehicles to be operated over the Highways of the United States. It is the intent of AASHTO that the limits expressed therein prescribed for vehicles shall be:

a. Absolute maximum limits which are inclusive of all enforcement, weighing, scale, or other tolerances;

b. Enacted in all States as soon as possible for roads and bridges on the completed portions of the National System of Interstate and Defense Highways and other Designated Highways;

c. Enacted in all States for all roads and bridges on other routes or systems after an engineering determination has been made by the State highway departments that the roads and bridges of these routes or systems over which such operations are to be authorized are sufficiently adequate in geometric capacity and structural capability to accommodate such operations safely and economically; and

d. Maximum limits, which are not to be exceeded in the laws of any State, during such period as this Policy shall remain in effect.

It should be noted, however, that the present Federal maximum tonnage is less than the maximum for certain types of vehicles recommended in this same AASHTO policy statement. Also State officials would object to penalties for failure to adhere to Federal maximum weight limitations on other Federal-aid systems.

4. In your opinion, should Federal funds be made available for bridge replacement as a separate category of funding?

ANSWER: We believe that bridge replacement is a very important program which deserves special attention in each of the States. AASHTO's position, however, calls for 4 categories of Federal-aid programs with the States given flexibility within those categories to make funds available for bridge replacement, which will receive high priority.

Senator Robert Stafford
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August 5, 1975

5. What would you think of a Federal program which made funds available only for bridge replacements and possibly other safety-related construction, leaving States and counties with sole responsibility for other types of construction?

ANSWER: We believe there is a need for a Federal role in the development of highway programs to assure continuity of routes and standards. Since all interstate travelers benefit from highway programs, we believe that Federal funding should be available to support State construction programs, particularly if highway users are continuing to pay Federal gasoline and other user taxes.

6. A recent GAO report criticized the Federal Highway Administration and States for not spending more regular Federal-aid construction money on bridge replacement. Would you comment on this criticism?

ANSWER: As noted in the report, the needs for financing bridge replacement are immense, now estimated at \$10.4 billion, and growing. As you know, however, other unmet needs for safe and efficient highways are also staggering. Yet the total amount of Federal funding in terms of constant dollars and of a percentage of the Gross National Product and the Federal budget has declined so that present levels of authorization represent less than half of what they were ten years ago. Existing highways are wearing out at the rate of approximately 5 percent per year, and the Administrator of the Federal Highway Administration has estimated that our highway plant is wearing out at a rate 50 percent greater than we are replacing it. Although State officials recognize that bridge replacements deserve a high priority, they also must weigh these priorities against other needs at a time when total funding is inadequate.

The Federal Highway Administration does not keep a current breakdown which would identify the percentage of authorized Federal-aid highway fund construction money used for bridge replacement. Many major bridge replacements are included as part of larger projects involving construction or improvements of additional roads.

The figures cited in the GAO report indicating that only 427 bridge replacement projects costing \$43 million had been funded with regular Federal-aid highway program funds from July, 1971, through March, 1975, are misleading. We have been advised by FHWA officials that they were based on an inventory that picked out only some bridge replacement projects which were readily identifiable, but did not include all bridge replacements. The cost estimate was based on an assumption that the average bridge replacement project cost was \$100,000, a figure which is far too low.

Senator Robert Stafford
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August 5, 1975

It also should be noted that FHWA administratively will not allow the cost of needed approach roads to be funded from the Special Bridge Replacement Program.

State officials are anxious to work with Federal officials to eliminate hazardous bridges, but we believe that the most important problem now is insufficient Federal funding for all highway needs.

7. Several Witnesses have indicated their displeasure with Federal realignment of the secondary system. What is AASHTO's position on this issue?

ANSWER: AASHTO has no formal policy position on this issue. State officials generally support the allocation of secondary funds to important collector's routes. They recognize the need, however, to develop other local roads and hope to work with county officials to assure adequate support.

Enclosed is a copy of a tabulation of responses to a questionnaire about the impact of the limitation of the secondary system to major collector routes in the 22 States which responded to the questionnaire.

We hope that these responses are satisfactory to you; and that you will call upon us if you desire additional information.

Sincerely yours,


B. L. DeBerry

Enclosure

Henrik E. Stafseth
Executive Director

July 21, 1975

AASHTO Federal-aid Secondary
System Questionnaire

Mr. William S. Ritchie, Jr.
AASHTO President
West Virginia Department of Highways
1900 Washington Street, East
Charleston, West Virginia 25305

Dear Sir:

On May 8, 1975, a questionnaire concerning the FAS system was sent to member states. The following is a tabulation of the results of the questionnaire received from 22 states.

1. How many miles of FAS routes will be deducted from your FAS system? Percent of present system?

The mileage reduction varied from a negligible reduction to a high of 13,100 miles. The percentage reduction varied as follows:

3 states	- 10% or less
3 states	- 10%-20%
5 states	- 20%-30%
5 states	- 30%-40%
0 states	- 40%-50%
5 states	- 50%-60%
1 state	- 60%-70%

Those states having the greatest reduction in mileage were the eastern and southern states.

2. What percent of major collector highways are improved to a tolerable standard as defined by the 1990 Needs Study?

3 states	- 10% or less
1 state	- 10%-20%
5 states	- 20%-30%
3 states	- 30%-40%
0 states	- 40%-50%
4 states	- 50%-60%
2 states	- 60%-70%
1 state	- 70%-80%
3 states	- Unknown

3. How many counties have 100% of their major collectors improved to a tolerable standard? 90%-100%? 80%-90%? less than 80%?

Nineteen states indicated that less than 80% of the major collector highways in each county have been improved to a tolerable standard.

Nine counties in the other three states have their major collectors 100% improved. Twenty-three counties have their major collectors 90%-100% improved. Twenty-five counties have their major collectors 80%-90% improved. The remaining 206 counties in the three states have less than 80% of their major collectors improved to a tolerable standard.

4. How many counties have revised their improvement programs in order to fund improvements on minor collectors prior to June 30, 1976?

None of the states have had major revisions in their programs. Most counties have proceeded with projects that were in the pipe line prior to the 1973 highway Act.

5. Do you favor changing the law to permit the FAS system on all collector highways?

13 states voted yes
8 states voted no
1 state was undecided

- a. If yes, should there be a mileage limitation imposed?

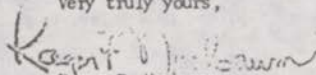
9 states voted yes
4 states voted no

- b. If yes, suggested parameters:

2 states voted for 10%-18% of the rural mileage
6 states voted for 25% of the rural mileage
1 state felt that the system should stay substantially the same with a possible 10% reduction in mileage.

Those states that voted to keep the present law felt this would be satisfactory providing the B&A will allow a liberal interpretation as to what is a major collector highway.

Very truly yours,


Roger F. Nusbaten
Chairman
Joint AASHTO-NACO-NACE
Committee

cc-
Henrik E. Stafseth, Executive Director

national grange

1616 H STREET, N.W.

WASHINGTON, D. C. 20006

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July 23, 1975

Honorable Jennings Randolph, Chairman
 Committee on Public Works
 United States Senate
 Washington, D. C. 20510

Dear Mr. Chairman:

The National Grange desires to express its views about the proposal of President Ford and the Administration concerning the Highway Trust Fund and highway legislation.

The President has proposed that the trust fund be extended past its current expiration date of September, 1977, but only for completion of the Interstate Highway System. He would divert three of the present four cents a gallon federal tax on gasoline (but not diesel fuel)--two cents to general treasury funds and one cent to those states that increased their taxes on gasoline by a like amount, otherwise to the federal treasury. In neither case would the taxes be dedicated to highway construction or reconstruction but could be used for any purpose. Federal funds for federal-aid highways other than the Interstate System would come from general revenue to such extent as authorized and later appropriated by Congress.

Before going further into this matter, let me say something about the interests of the Grange. The Grange is a 108-year-old rural family fraternity. While it is customarily or frequently looked on as a general farm organization comprised of producers of food and fiber, and while it has its roots in the farming community, many of its members reside in towns, villages, and suburban and urban areas. Moreover, while tied together by an interest in agriculture and the development of rural areas in which services will be available on a par with metropolitan areas, their interests cover a wider field.

Therefore, the Grange is more than a farm organization. Its purpose is to serve the total interests of the rural community and the nation. Thus, policies and programs of the Grange encompass a broad array of circumstances affecting the lives of rural Americans; they result from member action generated by total community and national interest -- not by agricultural interest alone.

Honorable Jennings Randolph

July 23, 1975

The delegate body of the National Grange, at its last Annual Session in November, 1974, adopted a policy statement entitled "Highways and Highway Expenditures". That statement is attached at the end of this letter.

The Administration proposal would convert three of four cents of the federal gasoline tax from a special tax on a particular class of citizens for a special purpose of immediate concern to that particular class into a special tax on a particular class of citizens for inclusion in general purpose funds of the nation. This appears to us to be, on its face, inequitable and unfair taxation. It may even be unconstitutional.

It is true that the Administration says that it would seek funds for federal-aid highways other than the Interstate out of general treasury funds thereafter and has spoken of annual appropriations of \$800 million for urbanized areas of over 50,000 population, \$1050 million for rural and smaller urban areas, and \$400 million for safety construction improvements. However, such appropriations would have to compete in Congress with all of the other needs of the nation and there is no assurance that a largely city-oriented Congress would not, for example, divert funds needed for highway purposes into "public welfare" channels. Such action might well appear attractive as a short-term proposition although it would be disastrous to the nation in the long run.

In so far as gasoline tax money is returned to the states, the ensuing problems would only be compounded. Fifty legislative bodies instead of only one would have to be dealt with and convinced of proper priorities. Incidentally, if the national government is to ignore the commitments it made in 1956 when it created the Highway Trust Fund, it would appear that it should return not only one cent of the gasoline tax to the states but the two additional cents as well. However, this would of course only increase the difficulties with the state legislatures and ignore what we believe is a proper national concern about the nation's highway system.

The nation's need for improved roads, particularly in rural areas, is very evident. Our highways are wearing out at a faster rate than they are being maintained and reconstructed. Rural access and collector roads, "farm-to-market" roads, have been relatively neglected since the emphasis was placed in 1956 on construction of the Interstate Highway System--with its higher proportion of federal funds. Hardly any of such roads will support a fully-loaded truck; and, if they could, there would be the situation of many tens of thousands of outdated and dangerous bridges. The Interstate Highway System will be of little value to the production of food and fiber and their distribution if trucks cannot get to the Interstate from the farms.

Honorable Jennings Randolph

July 23, 1975

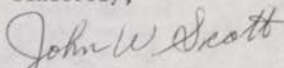
The problem is compounded by the fact that our railroad network has deteriorated and the need for transportation by truck has increased and will continue to increase.

This is not just a farm or rural problem. The cities are at least equally in need of good rural roads. The people in those cities must be fed and clothed. Even if this were still possible over a broken down system of rural roads, the situation would necessarily mean a considerable increase in the cost of these necessities of life. On the other hand, if we had a better rural road system, the increased prices we are now paying for food and other necessities could be lowered.

At this point it might be well to point out that improved roads and more efficient use of motor vehicles (trucks with full rather than partial loads, for example) will save fuel in this time of an energy crisis. Moreover, such roads will save lives and lessen accident damage costs. As has been repeatedly demonstrated, fatalities on rural roads outside the Interstate Highway System are more than twice as high as on the Interstate System.

Please make this letter a part of the record of any hearing you may hold on the Administration proposal, and please keep us informed on any hearings, as we may want to make additional comments.

Sincerely,


John W. Scott
Master

JWS:mm

cc: The President
Hon. William T. Coleman, Jr.,
Secretary of Transportation
All Members, Public Works Comm.

HIGHWAYS AND HIGHWAY EXPENDITURES

The National Grange is firmly convinced that a modern highway transportation system makes possible for Americans the freedom of mobility for people and commerce which is essential to our modern economy. For over 50 years, highway transportation has been basic to this nation's social and economic growth and will continue to be so for the foreseeable future.

The National Grange recognizes the other transportation needs of the nation, such as mass transit for movement of people, reversal of the deterioration of the railroad plant, improvement of transportation on our inland waterways, and other requirements if the nation is to develop a total effective transportation system of all modes. However, the Grange opposes those who wish to sacrifice highway transportation to meet other modal needs, namely mass transit.

The Grange is well aware of the dilemma that is faced when the needs of highway transportation in the nation exceed the prospect of highway user tax revenues from Federal, state and local sources while the simultaneous inflationary and recessionary economic pressures dictate that this is no time to further inflate the cost of necessary fuels by additional taxation. The situation calls for the best use of all existing highway funds without further taxation.

The National Grange further recognizes the need for the United States to be concerned with energy, environment, and economics simultaneously; but cautions that the balance is delicate and that all trade-offs must be considered by policy makers. We should not seek perfection of the environment at the cost of our freedom of mobility or of not producing, refining or transporting energy. Conversely, we should consider environmental factors in economic development and energy production. But most important, our leaders should take those steps that are necessary to insure that the nation experiences the sound, steady growth which is itself the economic "environment" that gives everyone the opportunity to put food on the table, be adequately clothed and be comfortable in his home.

To these ends, highway and transportation policies should meet the following criteria:

1. The non-inflationary pay-as-you-go policy represented by the Federal Highway Trust Fund and other present and future highway user taxes dedicated to highway related expenditures should be continued in the interest of economic soundness in transportation financing—it does not add to the public debt.

2. Other modes of transportation should be developed through their own assured and continuing financing systems or, if need be, from general tax revenues and should not be financed at the expense of highway transportation—a most important part of a total system.

3. It must be recognized that highways and bridges deteriorate and that continued maintenance, improvement, and construction for even better service is needed on national, state and local systems throughout the land and can only be accomplished with adequate financial resources.

4. The current economic situation in this country dictates that this is no time to further inflate the costs of necessary fuel through taxation in order to discourage use.

5. The Interstate Highway System should be completed as early as is reasonably possible in order to quickly reach the national goals, to save lives, to use less energy, and to improve greatly the nation's efficiency in the movement of goods—all of which the system has demonstrated it is able to do.

6. Impounded highway funds should be released to simultaneously provide needed jobs and build, improve and maintain an adequate highway system—highway construction and reconstruction is a high labor-demand industry.

7. The rural road systems in America are essential to the process of delivering food to the nation and supplies for production to the farm and must be given ample emphasis in national and state plans to insure that those systems are adequate, safe and efficient.

FUTURE OF THE HIGHWAY PROGRAM

FEDERAL ROLE IN THE HIGHWAY PROGRAM

THURSDAY, JULY 24, 1975

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION,
Washington, D.C.

The subcommittee met at 9:30 a.m., pursuant to recess, in room 4200, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee) presiding.

Present: Senators Bentsen, Randolph (chairman of the full committee), Buckley, Stafford, and Domenici.

OPENING STATEMENT OF HON. LLOYD BENTSEN, U.S. SENATOR FROM THE STATE OF TEXAS

Senator BENTSEN. This committee will come to order.

We will have Governor Holshouser, Governor of North Carolina, as the first witness.

In this morning's session, we will be discussing some of the basic questions about the Federal role in the highway program. But with much of our Federal aid program in place, and with the emphasis being shifted to rehabilitation and reconstruction of highways, there has been considerable discussion about returning much of the authority in the highway program to the States and the localities.

Governor Blanton, we are delighted to have you.

The administration bill, for example, proposes to consolidate all highway programs under four major categories with the States assuming greater responsibility for a number of features, such as environmental impact statements that were formerly Federal.

This morning we will hear from two distinguished Governors, from representatives of the State Highway and Transportation Officials, the National Association of Counties, and the National League of Cities and the U.S. Conference of Mayors.

We will hold all questions until the two Governors have testified and then the Chair would ask that the two Governors respond to each other, as well as to any questions that I might bring up.

With that in mind, we will proceed with the first Governor who appeared at the witness stand first.

STATEMENT OF HON. JAMES E. HOLSHOUSER, JR., GOVERNOR,
STATE OF NORTH CAROLINA, ON BEHALF OF NATIONAL GOV-
ERNORS' CONFERENCE, COMMITTEE ON TRANSPORTATION

Governor HOLSHOUSER. Thank you very much, Senator Bentsen.

We are honored and privileged to be here today, first and foremost to represent the people of North Carolina, but also to represent the National Governors' Conference and the State's position on the future of the highway program and, particularly, the Federal role in that program.

We believe that the Federal Highway Act, as amended, has created one of the most successful programs ever undertaken by the Federal Government. I believe that its successful history reflects two valid concepts: One being a strong Federal-State relationship; a partnership; and second, a trust fund method of financing.

Senator BENTSEN. May I interrupt? Do you have a prepared statement?

Governor HOLSHOUSER. Yes; I do.

Senator BENTSEN. I don't believe I was furnished with one. If you would proceed, sir.

Governor HOLSHOUSER. We believe that the Nation badly needs a national transportation policy which embraces all the major modes of transportation—highways, airports, railroads, and waterways.

Within this policy, we would submit that the Federal role should be prominent only as it reflects the need of clear national significance, such as national defense and the interstate movement of people and goods.

Of national significance, obviously, are the Interstate System, certain development highways, such as those in Alaska and Appalachia, and intermodal facilities that are critical to interstate commerce.

Perhaps the Federal-aid primary system is also of national significance. But with adequate revenue sources, we believe the States can fulfill the responsibility for the primary system. Within this context, the commitment of Federal resources should proceed under the same Federal-State partnership which has prevailed in the recent past.

Rigid, federally dictated policies cannot accommodate the many differences which distinguish the highway programs in the various States. For example, in North Carolina, our State highway system includes all public roads except local municipal streets, while many States have extensive road systems that are maintained on the county level.

Let me share with you some of my experiences as the Governor of North Carolina. Let's look at highways from where a Governor sits.

When I was elected, I knew that transportation was one of the highest priorities of our State. North Carolina has embarked on a 7-year construction program, geared to a program of long-range planning. It is a program based on planning that can only be done with some advance assurance regarding the availability of revenues.

Once the priorities were established and the time frames laid out, we were ready to move ahead in a cost-effective program for the benefit of the people of North Carolina and all of the people who use our transportation system.

We built a program based on certain revenue projections and well-planned priorities. As all of us know, events have changed much of this. The national construction costs, which have doubled since 1967, increased by about 25 percent in 1974 alone. During that same year, we saw the cost of materials increase by 46 percent in North Carolina. At the same time, State and Federal gasoline revenues are down 1 percent from last year.

In North Carolina, this has meant that we have had to shift some of our priorities. Some portions of highways under acquisition or construction have been delayed, and some of our highways are falling behind in maintenance.

These experiences—and similar experiences in other States—have clearly demonstrated to the Governors the need for continuation of the trust fund as a method of financing highway programs. There is also the further need for greater flexibility on the part of each State to transfer funds among various programs to meet its own priority transportation needs.

Highway programs typically take 6 to 10 years from planning to completion. In North Carolina, because of the trust fund, we have been able to plan for up to 7 years and get the best contract for each project, thereby saving the taxpayers' money.

Without the long-term obligational authority implicit in the trust fund concept, the necessary long-range planning would be impossible. The trust fund is also justified because it preserves a legitimate user tax for exclusive expenditures which directly benefit the user.

Our National Governors' Conference has called for the expansion of this successful concept by the creation of a single unified national transportation trust fund that would incorporate all transportation tax revenues and other tax revenues made available for transportation. We realize this is a proposal that can come only after extended research and that it may not be possible to proceed at this time.

Until the creation of such a unified trust fund, the Governors strongly urge the extension of the Federal Highway Trust Fund and oppose the diversion of any highway trust fund revenues to the general fund.

As a result of the recession, we have seen travel by commuters and vacationers decline. During the winter and spring of 1973-74, uncertainties about gasoline supplies reduced travel by car.

The 55-mile-per-hour speed limit has served to reduce, still further, the per capita use of gasoline. While construction costs have continued to rise, all of these factors have brought a sudden halt to the growth in revenue from highway users' taxes.

Therefore, at a time when every dollar now going into the highway trust fund is needed for highway improvements, it would be a serious mistake to erode the revenue sources available for this purpose.

Instead, we recommend that revenues that are not needed to fund programs of clear national significance—principally the Interstate System—be made available to the States by means of preemption—by allowing the Federal tax to be rescinded or reduced in those States that increase their own taxes by an equivalent amount. In this way, revenue sources would be increased in the States, where they are needed the most, without increasing the total tax burden of the consumer.

Specifically, the Governors have asked for a provision whereby States could preempt 3 cents of the Federal gasoline tax with all other highway taxes remaining in the highway trust fund to complete the Interstate System.

In the event Congress should decide against a preemption approach, we urge that all revenues be retained in the highway trust fund and allocated so that each State would receive at least 80 percent of the tax payments it makes into the fund.

In this case, and because the proliferation of categorical highway programs has created an administrative nightmare at the State level, we have also recommended consolidation into four programs: interstate, rural, urban, and safety. Of course that is incorporated into the Administration's proposal.

Increased emphasis should be given to the completion of the present Interstate System. An authorization level on the order of \$5 billion is required if the system is to be completed before the year 2000, assuming continuing inflation.

We are acutely aware of the connection between our Nation's energy policy and the future of transportation-based revenues. Successful energy conservation, by whatever means accomplished, will reduce State gasoline tax collections.

This threatens the ability of the States, not only to make new investments which may be required, but to maintain our present systems. The Governors' Conference urges the Congress to consider the effect which diminished revenues may have on the overall integrity of the Nation's transportation network.

Finally, the Governors believe it is important that transportation funds provided by the Federal Government flow directly through the Governor. As the elected chief executive of his State, the Governor is best able to determine his State's transportation needs and priorities. The Governor should be given the flexibility to transfer funds among various programs to meet the needs of his State, although there obviously have to be some limitations on that flexibility.

In summary, let me review some of the major positions that have been taken by the National Governors' Conference.

(1) We strongly support the continued development and improvement of the Nation's streets and highways as the backbone of our transportation system.

(2) We urge that the highway system continue as a partnership between the States and the Federal Government but that the 2-cent gasoline tax now proposed to be diverted from the trust fund to the general fund be added instead of the current 1-cent proposal to be preempted by the States. The remaining 1 cent should be allocated specifically for the development of the Interstate Highway System until it is completed.

(3) If the fund is extended without preemption, we ask that serious consideration be given to a formula which would provide that each State would not receive less than 80 percent of tax payments it makes into the highway trust fund. The remaining 20 percent would be allocated in a manner to insure a comprehensive, integrated, national transportation system.

(4) If the fund is extended without preemption, we also request consolidation into four programs: interstate, rural, urban, and safety.

(5) Finally, we suggest that during fiscal 1977, Congress and the administration should thoroughly review with the Nation's Governors the various transportation programs with the goal of a comprehensive and integrated transportation system.

This should be our highest priority. As I have mentioned before, declining State gasoline revenues are stunting the implementation of existing highway programs. We should avoid compounding the problem until we can replace fragmented transportation programs with a comprehensive system.

I can assure the committee of the unqualified cooperation of the Nation's Governors in this quest for better answers to tomorrow's problems.

Thank you.

Senator BENTSEN. Thank you, Governor Holshouser. It is a good statement. I would, rather than asking questions now, like to ask Governor Blanton, the Governor of Tennessee, to proceed. Then we will ask questions at the completion.

STATEMENT OF HON. RAY BLANTON, GOVERNOR, STATE OF TENNESSEE, ON BEHALF OF NATIONAL GOVERNORS' CONFERENCE, COMMITTEE ON TRANSPORTATION

Governor BLANTON. Thank you, Mr. Chairman, and Governor Holshouser.

I want to say to the distinguished chairman I do appreciate this opportunity to present Tennessee's position regarding the Federal role in the highway program, and also to represent the National Governors' Conference as a member of the Executive Committee.

We have come to the point when we must consider the impact on energy-related programs on our highways of the future. If we are realistic we must concede that the automobile is going to be our primary mode of travel for many years to come.

The energy situation will require more efficient engines and selective approach to travel.

The need for maintenance and improvement of our highway systems, therefore, will remain with us. We can expect some reduction in revenues because of decreased highway use. This makes it doubly imperative for us to choose our priorities very carefully when funding our highway program.

We feel that there are six areas which should be given attention by the Congress as you consider the landmark highway legislation for 1975.

1. The highway trust fund should be extended indefinitely. This would assure us that we would have adequate funding for the full Federal aid highway program. This funding would include construction, improvement, and maintenance costs of the National Interstate Highway System.

2. There should be a consolidation in the number of categories of the Federal highway programs and the grants.

3. Congress should take positive steps to reduce the amount of red-tape required in the administration of the highway program.

4. The highway user taxes should be reserved for the use of only highway programs.

5. Congress should not allow highway funds to be withheld as a means to enforce the administrative regulations, such as speed and weight limits and the billboard removal.

6. The statutory definition of construction should be amended to make it clear that reconstruction, restoration, and rehabilitation projects are eligible for Federal aid.

A project extending the useful life of the highway segment should be classified as construction. The six policies I have just outlined are firm convictions from the Tennessee viewpoint. We realize, however, that programs are born and developed out of the compromise and I would like to mention some areas that are up for possible compromise.

The President has recommended increased interstate authorizations and a reduction in categorical grants. I support this concept. We must be careful, however, not to abolish valid priorities identified in the studies accomplished through the joint Federal-State effort. For example, the facts show that our primary system and its urban extensions have been the upgrading stepchild since the interstate program began.

In 1973, as a result of the studies, Congress saw fit to establish an urban system and provide funds to aid local urban areas of 5,000 population and above. We are busy implementing this very legislation. The President's new proposal would limit the urban assistance to 50,000 population. This would cause smaller urban areas to compete for rural funds. The effect would be to injure the confidence and the open communication we have achieved with local governments.

I fear this would cause a breakdown in our cooperative relationship. Furthermore, if the urban fund grows at a faster rate, it would cause rural States to be shortchanged. We do not consider the President's proposal to divert funds from the trust fund to the general fund to be valid. Highway's needs are still prevalent. The user-pay for the system has been most successful and acceptable.

At the same time, the general fund should not have to supplement the highway improvement funds. The highway trust fund with the predictable revenues will give the States a chance to prepare our highway program in a stable manner. It takes from 5 to 7 years for project development before construction and that makes it vital that we retain the trust fund for future planning.

If Congress demands that the trust fund be modified, there are two possible alternatives. One is to create a transportation fund instead of diverting to the general fund, and to explore revenue sources in other modes of transportation. The second is to give the States an option to retain 1 cent of the Federal gasoline tax.

I think it a wise choice to retain highway safety as a separate program. I support the consolidation of categories in the safety program, giving the States responsibility to use funds as they see fit. There has been some discussion about spending Federal-aid funds on roads not included in the Federal-aid system. I see no problem in supporting local governments in this way if it is kept in the context of the highway safety program. The rural and urban funds should be limited to Federal-aid systems. I believe there is a definite Federal role in the upgrading of our primary system in a manner similar to the Federal-State partnership which has enjoyed success for many years.

The State highway departments have developed valuable expertise, and the Federal role in my opinion should be to provide the advice and the general monitoring. The States should be required to certify that program objectives are being met, not only in the primary system but in other areas of Federal assistance.

I want to thank the chairman for the opportunity to present this statement here this morning.

Senator BENTSEN. Governor Blanton, we are very pleased to have you back before this committee, and Governor Holshouser, we appreciate your continued interest in the highway program.

I would like to state for Senator Baker, who is a member of this committee, disappointment at not being here this morning. He is at Foreign Relations hearing Secretary Kissinger on the armed sales to Jordan question; he wanted to express his regrets for not being with you.

You two governors here are speaking for the Governors' Conference and yet we heard some contrary viewpoints such as Illinois. Did you take a vote on these things that you expressed today? Is it a consensus?

Governor BLANTON. We did vote and there was a consensus and there were some dissenting opinions. You can't put 50 people from one end of this country to the other and expect it always to be unanimous.

Senator BENTSEN. We find some of that problem in the Senate.

Governor HOLSHOUSE. Senator, normally there is a considerable majority that is required, I believe three-fourths at the time the original policy was adopted, in order for a position such as this to carry at the National Governors' Conference. At the June 11 meeting in New Orleans, it carried unanimously. Maybe some of them were asleep at the switch.

Senator BENTSEN. The Governor of Illinois?

Governor HOLSHOUSE. The Governor of Illinois was not there. He was one of the two or three who did not attend that conference. He still had his legislature in session.

Senator BENTSEN. You call for 3 cents of the 4 cents gasoline tax to be refunded to the States or for them to have a right on it. In other words, the Federal Government is just a tax agency. Why not do away with it and let you gentlemen put on such tax as you think should be put at the State level and not have a Federal tax beyond the 1 cent?

Governor HOLSHOUSE. As I understand the preemption doctrine that is exactly what we are talking about, that the State would preempt the collection.

Senator BENTSEN. So it would be a State tax and not a Federal tax that is what you are proposing with the full 3 cents to do the collecting and the disbursing?

Governor HOLSHOUSE. That is correct.

Senator BENTSEN. You discussed a unified trust fund, transportation trust fund. Both of you have touched on that. What kind of a time frame are you talking about to bring that about? The highway trust fund expires in 1977.

Governor HOLSHOUSE. That is correct. I think we realize that that is plowing some new ground in the sense of Federal area of responsibility. My own personal judgment is if that were to come about, it would probably have to be on a first-step basis of combining several

areas of transportation within one umbrella, but still restricting the use of the funds back to the mode of transportation in which the revenues were raised.

Senator BENTSEN. Why would you have a unified trust fund?

Governor HOLSHOUSER. It seems to me to take the various modes of transportation and have them working under the same umbrella so that the modes can be incorporated, it seems to me that in the past there has been a very definite tendency to have airports, rail, bus systems, waterways and highways planned at times without any given thought to what the other modes would have.

Senator BENTSEN. We have had a lot of testimony in the past and I am sure we are going to have some with later witnesses saying that if the Governors and the States control these funds that the urban areas are going to be neglected.

Both of you come from States that have large rural areas. Do you think there is validity to such statements?

Governor HOLSHOUSER. I will speak for my own State. We already have the 1-cent special levy for city streets in North Carolina.

Our legislature has also provided and perhaps is one of the few States to do this, a specific fund for helping with the non-Federal match where matching transit capital funds are concerned on action by the Congress. Adding that to the specific legislative authorization for urban and interstate through urban areas, we feel that we have done pretty well.

Governor BLANTON. Mr. Chairman, in our State we feel like that. We have a very fair distribution system for our State revenues that are collected for highway use, highway construction and maintenance. These funds are returned to the counties on a population basis and therefore the counties that are already metropolitan or urban, they get their exact fair share as a rural county does.

Senator BENTSEN. On the formula, on the population they get it.

Governor BLANTON. Right.

Governor HOLSHOUSER. I guess in our State, the State system or the Federal system as it moves through urban areas is already under construction and maintenance obligation of the State. We carry the whole system.

Senator BENTSEN. What triggered this statement that the State should receive at least 80 percent of those funds collected within their States?

Who feels like they are being put down or shortchanged in the present allocation system?

Governor HOLSHOUSER. We do for one. We are still getting back less than 60 cents on every dollar that comes to Washington and have been for about 20 years.

Senator BENTSEN. That statement is true for all taxpayers, I suppose. Governor?

Governor BLANTON. Mr. Chairman, I don't want to acquiesce from my position, believing that the funds that are collected from the highway users should still be used for highway construction. Supporting the concept of a consolidated transportation fund, this may sound like—that I am backing off, so to speak, from that position—but I do believe that the States must recognize, and Congress must recognize, that in order to look toward the future that we do have to

have a coordinated system that would coordinate land, sea, air, and the mass transit, the railroads and the highways.

For instance, I will give you an example. We had a plan some years ago for the Federal Government to go into airport construction.

This was put forth and was put to use without a coordinated effort with ground transportation. Therefore, we have some Dulleses across the country, Dulles airports that are there, functional, but no way to get to them.

Senator BENTSEN. Governor Blanton, you speak of the loss in revenue because of decreased highway usage. We don't have as much pressure on transportation. Does that mean a less thing of the amount of money that has to be spent on roads?

Governor BLANTON. I won't think so because the highways were already overloaded and our Interstate System, especially in our urban areas, were obsolete before they were constructed, because they were not adequate.

So the demand is there. We in Tennessee are having to expand and enlarge our Interstate System around the metropolitan areas already.

Senator BENTSEN. You speak of our not using highway funds as a carrot and stick by enforcing certain administrative regulations such as speed, weight limits, and billboard removal.

Don't you think we ought to be trying to use some economic incentive to try to standardize to a degree what the weight limitations are across this country of ours when we have trucks traveling from one end to the other with a great variety of weights and measurements?

Governor BLANTON. Mr. Chairman, I have always been an advocate of standardization, especially pertaining to highway transportation of commerce. I don't want to mislead you in the fact that I included that in that statement.

I do believe that there ought to be standardization, and the fact that the new Federal weight limitation was increased to 80,000 pounds, also points up the need for new construction and more maintenance money.

Senator BENTSEN. I would assume that as much as the Governors would be in accord with some of these objectives that they are not always able to get the legislatures to do everything they want them to do.

Governor BLANTON. I am a prime example of that.

Senator BENTSEN. I hear that as a common statement of Governors. I don't think that is attributable just to your State, Governor. I didn't mean that at all, but sometimes some of these incentives are helpful in the accomplishment of these objectives.

Governor BLANTON. I thought that the new Federal weight limit would be an incentive for our legislature to comply with it and also use it as a leverage to increase some revenues. I failed to get that measure passed.

Senator BENTSEN. Senator Stafford, do you have questions?

Senator STAFFORD. Mr. Chairman, thank you. I understand that as chairman you have asked some questions that interested this Senator also.

I am very happy to see my former colleague from the House, Governor Blanton, here. I wasn't able to be here earlier because the

air pollution subcommittee of our parent committee was meeting in conflict with this hearing for its first half hour.

Senator BENTSEN. Governor Blanton, again, we are very pleased to have you with your continued expression of interest in transportation in this country, and the leadership you have shown.

Governor Holshouser, we are very appreciative of the testimony you have presented this morning that we think will be most helpful to us in our deliberations. You have made a contribution to it. We understand that you have other responsibilities. We will not try to hold you for the rest of the panel.

Governor HOLSHOUSER. I might add one thought, if I could. I was asked earlier this morning by a reporter why some of the Governors would be willing to take the position in concert concerning the pre-emption idea when it might mean a smaller gross amount of funds coming into their own State Highway Fund.

Having served on the Transportation Committee of the Governors' Conference and hearing the discussion there, I found that a number of the so-called donee State Governors feel very strongly that even with a lesser amount of money, if they could be allowed to run their own program, without all the redtape that comes from our association with the Federal Government, that they will come out ahead.

Senator BENTSEN. I think our State, the State of Texas, I think that 80-percent figure just about strikes us where we are. It really doesn't make much difference. We get back about 80 percent.

The chairman of the full committee was in here for a short time. I know he regrets very much that he hasn't been able to participate more with these two distinguished Governors here. But we have about, as Senator Stafford was talking, all kinds of committee meetings this morning.

Thank you very much.

Governor BLANTON. Thank you, Mr. Chairman.

Senator BENTSEN. We have Commissioner Bill Ritchie of West Virginia, of the West Virginia Highway Department, president, American Association of State Highway and Transportation Officials. Would you please come forward, Mr. Commissioner?

STATEMENT OF WILLIAM S. RITCHIE, JR., COMMISSIONER, WEST VIRGINIA HIGHWAY DEPARTMENT AND PRESIDENT, AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

Mr. RITCHIE. Thank you very much, Mr. Chairman.

It is a privilege for me to be here representing the Association of State Highway and Transportation Officials. We are extremely proud of the accomplishments of the Nation's highways developed by the State-Federal partnership under enlightened congressional leadership.

Highways are America's basic transportation system that serves the entire country and they have made an essential contribution to the recent reversal, we believe, in growth patterns in rural areas. We believe a continuing Federal role is important to insure a continuing of standards in rural, suburban, and urban areas.

Federal-aid primary routes, other than those in the interstate system, are the connecting highways for most communities over 5,000 population. To be effective, these main arterial routes should be supplemented by the rural and urban collectors and local systems.

However, the States must continue to maintain, we believe, the responsibility for meeting State needs on main arterial routes, both urban and rural. Programs for these routes in the urbanized areas should be developed in consultation with the local officials.

AASHTO recognizes the concern of the local officials in the development of programs for rural and collector roads and streets, particularly in urban areas where it may be appropriate to invest in other modes. State control is important, however, we feel to assess the priorities and to maintain the standards.

The highways should be developed as part of an overall national transportation program, but prior to embarking on a new comprehensive program, the Nation, we feel, should develop a comprehensive transportation policy.

We in AASHTO now are trying to collect the feelings of all of the States through a task force to develop a suggested national transportation policy, considering all of the facets and all modes of transportation. We should complete this before the end of this year and have a suggested policy containing all of the thinking of the States.

But any comprehensive program must be built, I think, on the success of the highway program because it has been, we feel, the most successful public works program ever undertaken by the country.

To maintain highways on the basis of a comprehensive program, we feel that the needed funding of a highway cannot be diverted from highways to other modes of transportation. The most urgent legislative need for surface transportation this year is continued funding of the highway program because we had \$11.8 billion provided last year for mass transit through 1980.

We realize there is a need to assist railroads, but there is still much uncertainty over the extent and the form of such assistance and apportionment for highways are being exhausted in many of our States. Capital improvements for highways and other transportation systems should have assured financing, preferably from a dedicated source. The highway trust fund and the contract authority, we feel, should be extended.

The present levels of funding, the Federal highway funding, have declined significantly in terms of constant dollars and as a percentage of the gross national product and the Federal budget. We feel that just to maintain the current highway condition requires the replacement of about 5 percent of the highways in the country each year.

The highway plant is now wearing out 50 percent faster than we are replacing it, which I think would lead us in the long-run to end up with our highways in the same situation that railways are in this country. We need to do more to maintain the status quo to protect our investment in the highway, enhance safety and preserve energy. We would like to make a few legislative suggestions on some of the following points.

One, the completion of the gaps in the Interstate System with the funding of \$5 billion a year. If I could speak for a moment from my own State's experience, we let two projects on the interstate that were ready to go to contract approximately 2 years ago, but because of the environmental procedures, we were delayed 2 years in letting the contracts and the cost of the projects increased from \$16 million to \$34 million in that 2-year period of time.

So we feel that we are getting half of the number of miles of road per dollar now than we were 2 years ago. I think, as you know, any continuation in the inflation rate close to what we have had would continue that process.

We also have a particular problem in our State of three interstates connecting, feeding into a two-lane highway that we are ready to go to contract on, but do not have the Federal funding. I think this is one of those gaps in the Interstate System that needs to have some special attention.

I think to help us expend these moneys, if we had a reduction of the Federal aid categories that I know you are considering would help us to expend these moneys at a faster rate and get the job done quicker; that, along with the transfer of urban and rural funds because of the problem we have in obligating those funds in the special categories.

If we could have a revision of the apportionment date, preferably we might suggest to October preceding the fiscal year to allow us for planning further ahead as far as the amount of money that we would have to spend and along with that, if we could have or consider a 4-year authorization period, rather than 2 years, to plan our program and set up our work schedules.

One of the largest problems that we face on the State level is the environmental requirements. If we could have some clarification to avoid duplication, in the applicability of new requirements to projects already approved and to provide a cutoff date for a judicial review of the environmental statements it would expedite processing.

Along with this, we would like to suggest the strengthening of the urban transportation planning process to assure the continued State leadership with these problems. We feel that this coordination is very needed and very necessary. If we could have an expansion of the certification acceptance to include all Federal requirements, I believe it would go far to expedite projects as far as the redtape problem that we all have on the local State and national level.

I think one thing we ought to look at as we look down the road is some inclusion in any new Federal tax for energy conservation, a provision to devote, we suggest, at least 25 percent to transportation and to allow State taxes in lieu of any portion of any Federal increase. We feel that these suggestions, because of the high cost of construction as well as maintenance in the States, need to be considered very seriously because any reduction in usage, together with any increase in efficiency of automobiles does adversely affect the income of the States.

I think, Mr. Chairman, that generally outlines our position. I would request that our full statement be made a part of the record. We would be glad to answer any questions you might have, sir.

[Mr. Ritchie's written statement follows:]

WRITTEN
STATEMENT OF
WM. S. RITCHIE, JR., PRESIDENT OF
THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
BEFORE THE
SUBCOMMITTEE ON TRANSPORTATION
OF THE
SENATE PUBLIC WORKS COMMITTEE

July 24, 1975

Mr. Chairman, Members of the Committee, my name is William S. Ritchie, Jr., Commissioner of the West Virginia Department of Highways, appearing in my capacity as President of the American Association of State Highway and Transportation Officials. As State Officials, we are proud to visit with you to discuss the renewal of the most successful of all Federal-aid programs.

Under enlightened Congressional leadership, due largely to the dedication and foresight of members of your Committee, State and Federal officials have worked for over 60 years in a true partnership to develop a highway system which already represents one of the most remarkable achievements of any civilization.

The recommendations we will be making to you today represent policy positions of the Association adopted at a meeting of the Chief Administrative Officers of all the State Transportation and Highway Departments on April 22nd, 1975. In order for a policy position to be taken by AASHTO, it must be approved by two-thirds of the membership. Thus, any policy reflects the approval of at least 35 States.

Highways are America's basic transportation system, serving all 212 million of us. They have brought measurable and immeasurable economic, social and cultural benefits to our society by enhancing the economy, and providing for the safe and efficient mobility of goods and people over small and vast distances, both urban and rural.

We also should think about the essential contribution highways have made in the past decade to a development which represents one of the most significant improvements in the American environment during that period - the reversal of population growth patterns in rural areas.

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Recent studies by the Census Bureau have shown dramatic changes in rural areas, such as the Appalachian region, the Ozarks, and the Upper Peninsula of Michigan. Population is now growing in portions of these areas, and others, at a faster rate than in large metropolitan areas. This trend is a dramatic reversal of past patterns of population decline in these rural areas, together with rapid growth of metropolitan areas.

By providing access to large urban areas, and national or regional markets, highways have made it feasible for industry, and jobs, to locate in remote rural areas. Arterial rural roads have expanded the service areas of commercial and governmental facilities, such as hospitals, in smaller communities which are developing as growth centers.

Another important impact of highways on the human environment is the ability it gives to Americans to live in locations which they prefer. Studies cited by the Task Force on National Population of the Science Advisory Panel, in its report of December 1974, to the House Committee on Public Works and Transportation, showed that 53 to 55 percent of Americans would now prefer to live in a small town or farm, and that only approximately 13 percent would prefer to live in a large city.

We all must recognize, however, that the task of providing an adequate highway system to meet this country's social, cultural and economic growth, resource development and related travel needs, is far from complete. The highway plant is physically wearing out. Federal Highway Administrator Tiemann has commented in recent speeches that it is wearing out at a rate 50 percent greater than we are replacing it. A portion of the system must be renewed every year, just to stay useable. The average life of a highway is approximately twenty years, thus, 5 percent of our total network of 3.7 million miles must be replaced every year just to keep even.

NATIONAL TRANSPORTATION PLAN

We believe that the highway system should be developed as part of an overall National transportation program covering all modes of surface transportation. But we also believe that prior to embarking on a comprehensive new transportation program with allocation of priorities among modes, the Nation should develop a comprehensive transportation policy. To this end, AASHTO has convened a task force of some of the most qualified individuals in our member departments to formulate a recommended National Surface Transportation Policy for the Nation.

Any comprehensive national program must build on the success of the highway program. To maintain the highway system as a basis for a comprehensive transportation system, needed resources cannot be diverted from highways to other modes. Needed improvements in other modes must

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come from other sources, such as equitable direct taxes on the users, and general revenue funds supplied by beneficiaries of such other modes.

MASS TRANSPORTATION PROGRAM

Last year, Congress provided funding for construction and operating expenses of mass transit through 1980. The revised program has had its usual difficulties in warm-up time, and it is probably too early to tell how well the program will operate overall. We suggest that at an appropriate time Congress give consideration to changing the law to provide that Federal funds flow to the States for apportionment within the State, so that a balanced statewide public transportation program can be developed more reflective of total local needs.

We encourage the extension of the provisions of Section 101(e) of Title 23 calling for a minimization of paperwork in the mass transportation program, as well as in highways. The Secretary should be called upon to periodically report on his progress in achieving these goals. Every effort should be made to ensure that the activities of UMTA and FHWA are complementary, but not duplicative.

RAILROADS

We recognize the needs existent in inter-city rail transportation, but there is much uncertainty over the form in which assistance should be provided.

Effective rail freight movement is essential to the national security and economy. The U. S. Department of Transportation should now be called upon to develop, in cooperation with the States, a basic national rail system plan and program to meet these pressing needs. In so doing, Federal funds from the General Fund of the Treasury should be made available through the States for an in-depth investigation of the need for a critical railroad bridge replacement program analogous to the highway bridge replacement program.

We endorse President Ford's call for evaluation of current regulatory practices to see if less stringent regulation of all freight and commodity movement might not be in the public interest by eliminating or reducing restrictions on freer competition among and between modes.

INTERSTATE SYSTEM

It is particularly important, at this time of national and international concern, to complete the unconnected essential links of the National System of Interstate and Defense Highways. This is a system of high national priority, as its title signifies.

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The estimated cost of eliminating these gaps and completing the Interstate is now \$32 billion, not including 1976 and prior year unobligated authorizations. In order to hasten completion of the System, we recommend that annual authorizations be set at \$5 billion per year. This amount is needed to offset the inflationary increases of the past two years.

It is important to eliminate these gaps, in order to protect the immense investment we have already made in the Interstate System, which cannot operate at maximum efficiency when links remain unconnected. Furthermore, these gaps present safety hazards by exposing drivers to changes in driving conditions when they are forced to leave a limited access highway, developed in accordance with the most modern safety features, to travel on an older road often cluttered with commercial development. The gaps also aggravate energy problems by impeding traffic flow, so as to require greater fuel consumption.

AASHTO also recommends that those sections which are not to be built should be deleted from the System.

RURAL NEEDS

Increasing stress is being placed upon our rural transportation network in order to move commodities to the marketplace, and particularly since our agricultural products appear to be our greatest source of foreign revenue. Increased agricultural production and sales abroad are needed to help offset the deficit in our balance of payments caused primarily by increases in costs of foreign petroleum.

The condition of much of our rural network of highways has been allowed to deteriorate over the past twenty years while national attention, effort and resources have been focused on construction of the Interstate System. Yet, the rural, primary and secondary systems, coupled with their urban counterparts, are those systems which truly serve constituencies of every Congressional district within the United States.

Our rural system of highways has been, and will continue to be in the foreseeable future, called upon to carry commerce which, heretofore, has moved over the rail network. In many localities, rail service has either been severely curtailed, or discontinued altogether, due to equally serious physical and fiscal deterioration of the rail system.

Equally important, as our country moves toward energy independence, is the transportation of coal to market. As new mines are opened up, both our highway and rail systems will be called upon to provide increased service for heavier and more frequent loads.

URBAN NEEDS

There are also significant urban needs for highway improvements.

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AASHTO strongly supports efforts to improve urban mass transit, and we believe that highway improvements should be compatible with improvements for mass transit. Except in a very small number of cities, mass transit is highway transit. Even in those few cities with extensive rail transit systems, there is need for streets and roads to provide feeder services and serve areas not reached by the rail system. The value of property is, in large measure, dependent on its accessibility.

Highway improvements can lead to multiple use of capital facilities by mass transit and other vehicular traffic, with resulting cost economies.

Although we strongly support efforts to improve mass transit, we all must recognize that there are limits to what might be accomplished by this mode of transportation. For instance, since mass transit ridership, both rail and bus, now accounts for only 5 percent of work-related trips, even if that ridership were doubled, energy or gas consumption would only be decreased by approximately 1 percent. The cost of providing facilities and services to double ridership must be carefully evaluated, and we should be certain that energy resources will be available for expanded operations.

Streets and roads can play a significant role in the environmentally sound development of urban areas by allowing a dispersal of facilities away from major transportation corridors.

Most of the needs for highway improvements in urban, as well as rural, areas can be met by upgrading facilities within existing alignments where reconstruction is needed to prevent deterioration, and to incorporate modern criteria of safety design.

In sum, we look for an urban program of highway and mass transit improvements in which each mode will complement the other.

FINANCE

Despite staggering needs on all highway systems, Federal expenditures and authorizations in highways have declined in recent years in terms of constant dollars and a percentage of the Federal budget. The Federal Highway Administration reports that costs for the construction of highways in 1974 had inflated to over twice what they were in 1967, and almost three times what they were in 1956. Yet, during this period of 1967 to 1974, highway authorizations only increased from \$3.25 billion to \$5.48 billion - an increase of only 70 percent - so the actual physical construction able to be put in place has declined.

In 1960, commerce and transportation represented 5.2 percent of the Federal budget. By 1974, this percentage had decreased to 4.9 percent. The President's budget estimated a total outlay for all transportation

TOTAL DISBURSEMENTS FOR HIGHWAYS BY
FEDERAL, STATE, AND LOCAL GOVERNMENTS
1954-74
(In Millions of Constant Dollars^{1/})

Year	Federal	State	Local	Total
1954	917	5,003	3,224	9,144
1955	1,055	5,384	3,460	9,899
1956	1,076	5,534	3,335	9,945
1957	1,659	5,539	3,444	10,642
1958	2,867	5,400	3,808	12,075
1959	3,949	5,305	4,022	13,276
1960	3,437	5,748	4,251	13,436
1961	3,644	6,169	4,428	14,241
1962	3,764	6,458	4,371	14,593
1963	4,351	6,344	4,412	15,107
1964	4,923	6,299	4,586	15,808
1965	4,590	6,619	4,564	15,773
1966	4,618	6,956	4,761	16,335
1967	4,197	7,510	4,962	16,669
1968	4,451	7,808	5,133	17,392
1969	3,814	7,799	5,180	16,793
1970	3,850	7,719	5,019	16,588
1971	4,016	7,937	5,116	17,069
1972	3,682	7,950	5,154	16,786
1973	3,124	7,567	4,980	15,671
1974	2,449	5,920	4,053	12,422

^{1/} Based on construction price index using 1967 dollars as 100.

**RATIO OF HIGHWAY TRUST FUND EXPENDITURES
TO TOTAL UNIFIED BUDGET OUTLAYS,
FISCAL YEARS 1964-1976**

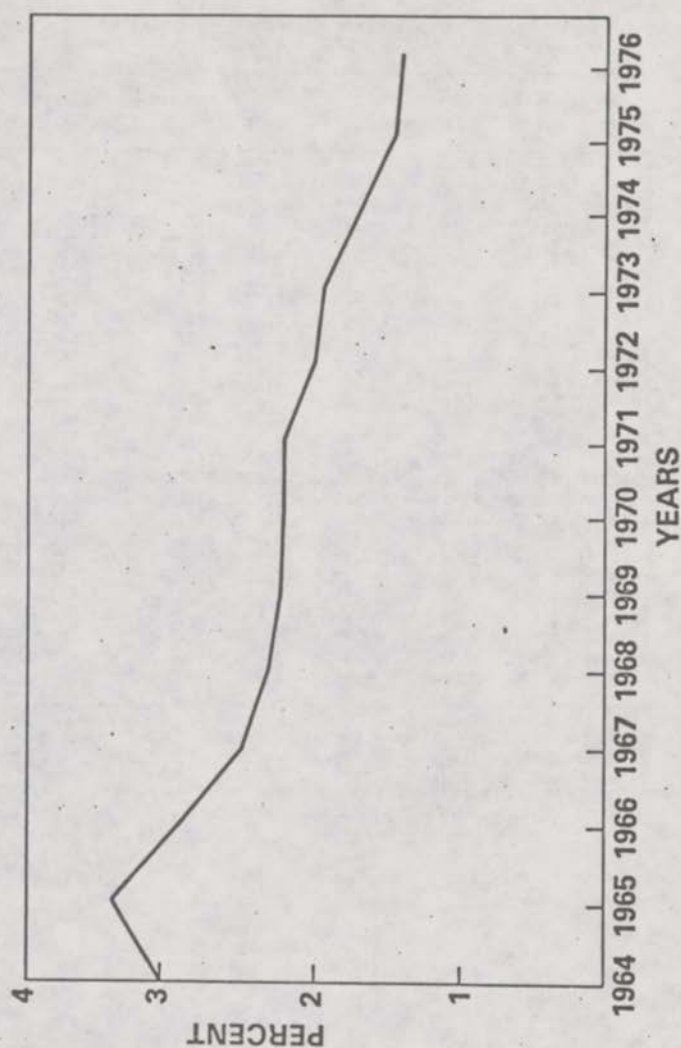


Table V--Federal Highway Authorizations
(In millions of dollars)

Year	Inter- state	ABCD	Other	Total	Bid Price Index	Constant Dollars	Index (1967 = 100)
1955	25	550	11	586	74.3	789	19.9
1956	175	700	9	884	84.0	1,052	26.6
1957	1,175	825	12	2,012	87.7	2,294	57.9
1958	1,700	850	32	2,582	85.6	3,016	76.2
1959	2,200	1,275	24	3,499	82.0	4,267	107.8
1960	2,500	900	19	3,419	80.1	4,268	107.8
1961	1,800	925	9	2,734	80.7	3,388	85.6
1962	2,200	925	5	3,130	83.8	3,735	94.3
1963	2,400	925	--	3,325	86.4	3,848	97.2
1964	2,600	948	--	3,548	86.9	4,083	103.1
1965	2,700	953	--	3,653	90.3	4,045	102.1
1966	2,800	1,000	52	3,852	96.1	4,008	101.2
1967	3,000	1,000	40	4,040	100	3,959	100.0
1968	3,400	1,000	86	4,486	103.4	4,338	109.6
1969	3,800	1,000	78	4,878	111.8	4,363	110.2
1970	4,000	1,425	61	5,486	125.6	4,368	110.3
1971	4,000	1,425	104	5,529	131.7	4,198	106.0
1972	4,055	1,425	225	5,705	138.2	4,128	104.5
1973	4,055	1,425	237	5,717	152.4	3,751	94.7
1974	2,650	2,207	412 ^{1/}	5,269	203.6	2,588	65.4
1975	3,050	2,265 ^{1/}	976 ^{1/}	6,291	225.6 ^{3/}	2,789	70.4
1976	3,050	2,415 ^{1/}	1,451 ^{1/}	6,916	242.5 ^{3/}	2,852	72.0
1977 ^{2/}	3,400	2,200	--	5,600	258.3 ^{3/}	2,168	54.8
1978 ^{2/}	3,500	2,200	--	5,700	271.4 ^{3/}	2,100	53.0
1979 ^{2/}	3,600	2,200	--	5,800	282.4 ^{3/}	2,054	51.9
1980 ^{2/}	3,700	2,200	--	5,900	293.8 ^{3/}	2,008	50.7

^{1/} Additional authorizations contained in 1974 Federal-Aid Amendments.^{2/} Department of Transportation proposal.^{3/} Based on GNP deflator in 1976 U.S. Budget.

Source: Price Trends for Federal-aid Highway Construction, FHWA

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programs of \$9.3 billion in this past fiscal year, increasing to \$12.2 billion in 1980, and in both cases representing only about two-and-a-half percent of the total budget. In the last ten years highway expenditure declined from over three percent to less than two percent of the Federal budget.

In 1930, highway construction represented 2 percent of the Gross National Product; today, it represents slightly over one-half percent.

At this time, the need for Federal assistance is increasing because of increasing costs and shortfalls in anticipated State revenues. Declines in anticipated gasoline consumption have led, and will lead, to declines in anticipated revenues from gasoline taxes. These revenues are used for maintenance, administration, and other highway-related purposes, as well as for construction. Costs for both maintenance and construction have increased sharply in recent years (over 25 percent in 1974).

The latest complete official record of highway financing is for the 1973 fiscal year. At that time, the income available for use for all purposes on all roads and streets in the nation was \$23.9 billion, of which \$17.4 billion came from the motor fuel and vehicle taxes.

Expenditures on all roads and streets, including construction, maintenance, debt service, administration and some law enforcement was also \$23.9 billion. However, for the State highway programs the construction on rural roads totaled \$5.6 billion, and for urban extensions, which constitute 10 percent of the 780,000 miles of State highways, was \$3.4 billion, for a total of \$9.0 billion. To this must be added \$1.3 billion spent on local rural roads and \$1.3 billion spent on local municipal roads and streets for a total capital outlay of \$11.9 billion (includes \$0.3 billion not identified by system).

Of this \$11.9 billion figure, only \$4.2 billion, or less than 40 percent, came from the Highway Trust Fund. In other words, considering the 90-10 matching on the Interstate, and the 70-30 matching on the ABCD programs, the Federal contribution was less than half of the total construction outlay.

For maintenance, the States expended \$2.0 billion on rural sections of the State highway systems, and \$0.5 billion on the urban extensions, for a total of \$2.5 billion and, of course, there is no Federal-aid for maintenance. The State highway departments do not want Federal-aid for this purpose.

The State highway departments are under such public pressure back home at the present time to supply more roads that nine States increased fuel taxes in 1975, and legislation is still pending in twelve States to increase gasoline taxes.

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Without continued Federal assistance, States would be forced to severely curtail necessary highway improvements. A Federal program is also necessary to promote uniformity between systems and between States.

HIGHWAY TRUST FUND

For capital improvements for highways, and other transportation systems, it is essential to have assured financing available over several years, preferably from a dedicated source. Accordingly, we think it most important to extend the Highway Trust Fund, and the contract authority method of financing projects.

The Highway Trust Fund has proved to be a very successful mechanism for funding the highway program. Many people are under the impression that the Trust Fund only provides financing for the Interstate System. As you all know, this is an erroneous impression, as the Federal-aid primary, secondary and urban systems have first call on those funds. Since it was first set up in 1956, other highway programs that had been funded out of the General Fund of the Treasury were incrementally added to the demands on the Highway Trust Fund. No new revenues have been added since 1959, when the Federal gasoline tax was increased from 3 cents to 4 cents.

The genesis of the trust fund concept occurred in 1953, when the outline of the Interstate program was first being developed from the Interregional Highway Report of 1944.

Both the trust fund and the bonding type of programs were explored, along with variations of both. It appeared that the bonding type would ultimately cost the user a considerable additional amount of money, and that the trust fund would probably be the most satisfactory way of handling it.

It was also the judgment that all the States could not simultaneously increase their own respective State highway revenues in adequate amounts to handle their proportionate share of building the Interstate System.

It, therefore, appeared that the solution would be to utilize the Federal collecting and distributing mechanism to create and use a Highway Trust Fund primarily to fund an Interstate program, along with a modest ABC program continuation which previously had been financed from the General Fund, but into which generous sums of highway user revenues were paid, far in excess of the amounts authorized for highways.

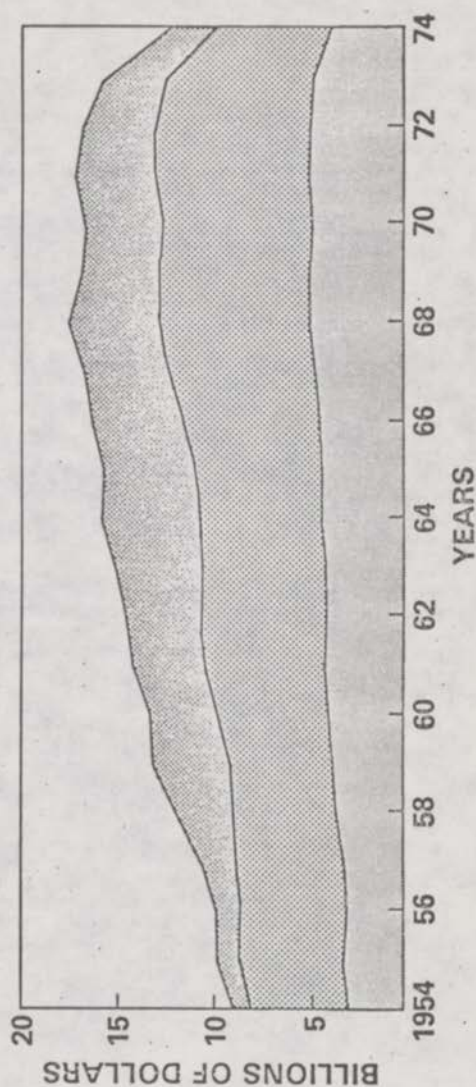
In arriving at the Highway Trust Fund concept in 1953, it was based on section 126 of title 23, which is a part of the Federal-aid Highway Act of 1934, known as the Hayden-Cartwright Act, and we quote,

TOTAL DISBURSEMENTS FOR HIGHWAYS BY FEDERAL, STATE, AND LOCAL GOVERNMENTS

1954-74

(In Constant Dollars)

FEDERAL
STATE
LOCAL



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"Since it is unfair and unjust to tax motor vehicle transportation unless the proceeds of such taxation are applied to the construction, improvement or maintenance of highways....."

Also considered was the fact that 28 States had a constitutional amendment dedicating highway funds for highway purposes.

However, when the Clay Committee developed a report to the President, to be used as the basis of the President's "Grand Highway Plan" in 1954, it recommended a bond program.

When the matter got to Congress, your Committee and the Ways and Means Committee of the House changed it back to the trust fund concept.

The enabling legislation of 1956, which established the program, provided for a continuing ABC program at a level slightly in excess of what had been authorized in 1954 and 1955. Under the program legislation, all of the balance of the trust fund receipts was to be used in building the Interstate System.

If the Energy Conservation and Conversion Act, recently passed by the House, becomes law in its present form, certain revenues now going into the Trust Fund will be lost. These taxes are the excise tax on radial tires and on intercity buses, and amount to about \$80 million per year.

Since its original creation in 1956, when the philosophy of the Trust Fund was to provide a floor of revenues under the program to be supplemented by General Revenues, many people have come to regard the Trust Fund as a ceiling on the program calling for additional needs to be met out of the Trust Fund without providing any additional revenues to cover these additional needs. A great measure of the success of the highway program can be traced to the fairness of the taxing system, and the willingness of the taxpayer to contribute when he can daily see and use visible, tangible evidence of the results of his contribution.

At the present time, many States are rapidly approaching the exhaustion of authorized apportionments for Federal-aid highway programs, particularly the Interstate System. It is imperative that renewed funding be made available for these programs.

Although authorizations, and a continued source of Federal funding are the most urgent needs for highways, there are legislative changes which we suggest you might consider at this time.

AUTHORIZATIONS

AASHTO believes it is important that the current provisions in title 23, relating to the sliding scale for matching requirements of Federal-aid

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funds, be retained. Those States which have large amounts of lands held in the Public Domain do not have the necessary tax base, and, thus, opportunities for raising matching revenues, in comparison to the ability of other States, and, therefore, it is in the national interest for the movement of commodities and other national concerns that this wise provision of many years standing be maintained.

We have referred earlier to the necessity for contract authority, and for assurance of long-range funding in capital improvement programs, in light of the long lead-times now necessary to bring a highway or transportation project to fruition. Recognizing the many demands placed upon the Congressional committees as their responsibilities broaden, and their interests deepen, we suggest that you may wish to give consideration to establishing a four-year authorization period, rather than the historic biennial authorization which has been followed in the Federal-aid highway programs in the past. The 1973 Federal-aid Highway Act, of course, did utilize a three-year authorization period, and without any serious consequence. As highway and transportation officials responsible to the public, our executive and legislative bodies, we believe we speak for State, county and municipal interests in this regard. Transportation projects and services require, of necessity, long lead-times to complete. Assurances of funding over a greater time span than two years permits governments at all levels to better plan and program essential resources. The highway program has always been responsive to expressed public demands for performance.

In the fiscal year just ended, the States were able to obligate \$7.93 billion. This, under the unusual situation of only having an initial obligation level of \$4.6 billion. On February 12th, President Ford released \$2 billion in impounded funds at the urging of many Governors, to increase employment and help prime the economy. It was a move which we strongly endorsed, and we pledged our support in achieving this goal. Then, in May, the Senate, under the leadership of Senator Randolph, passed Senate Resolution 69, overturning the balance of the impoundments. We feel that this achievement clearly demonstrates the ability of the States to carry out a program level of over \$8 billion per year under normal circumstances.

It also is important to note that highway construction provides a significant number of jobs, and that any disruption in the program caused by exhaustion of apportionments, or any other reason, can cause severe hardships in an industry which already had unemployment in excess of 21 percent in May of this year. Based on a review of payroll records and other methods, the Federal Highway Administration estimated that \$1 billion of highway construction generates over 130,000 man-years of work, consisting of 26,000 man-years of on-site and 29,000 man-years of off-site employment, and 77,750 man-years of induced employment.

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DATE OF APPORTIONMENT

Under current Federal law, apportionments are made no later than January 1, preceding the beginning of the fiscal year. This is so State Legislatures meeting each year will have the opportunity to provide in their budgetary process the necessary State funds to carry out the program. With the change in the Federal fiscal year to October 1, beginning next year, it is imperative that the date of apportionment still be retained at no later than January 1, and it would be desirable if it could be backed up to October 1 of the year preceding, so that State administrative officials would have these apportionment letters available to them during the final phases of their budget preparation prior to submission to the Legislatures.

CATEGORIES

State officials strongly urge that the number of Federal-aid categories be reduced and simplified, with States being given more discretion to transfer funds among categories.

In this regard, we note with approval the Administration proposal to reduce the number of Federal-aid categories. We also welcome the attitude expressed by co-sponsors of H. R. 8235 in advising their colleagues that they planned in their hearings to re-examine carefully the present categorical restrictions.

The AASHTO Policy Committee approved on April 22, 1975, a policy recommendation that the number of Federal-aid categories be reduced to four: Interstate (or in Alaska, funds in lieu thereof), Safety, Urban and Rural. This proposed reduction in categories does not include categories for Forest Highways, Parkways, Public Lands Highways, etc., which are administered by the Federal Highway Administration and other Federal agencies, and not by the State highway agencies directly.

During the period from 1956 to 1975, the number of Federal-aid categories has increased from 6 to 34. Each new category has necessitated its own program requirements and administrative controls, resulting in increased administrative costs not only to the States, but to the Federal Government, as well. To this must be added the multiple additional costs of other Federal laws and administrative requirements impacting on the highway program, which have helped increase the costs and the time to produce needed facilities.

Neither do the expanded array of categories reflect the annual needs of each of the respective States, which differ considerably on a year-to-year basis. The restrictions imposed by categorical apportionments severely infringe upon the ability of each State to establish an annual program.

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We recognize Congressional concern over the need to make certain improvements in highway facilities, particularly to implement higher design characteristics to enhance the safety of motorists. We also welcome Congressional guidance about areas which deserve special attention, and about priorities for expenditures in such areas of particular concern.

We believe, however, that these Congressional purposes could be met better by the expression of Congressional directions to address certain problems, such as bridge replacements, the establishment of informal goals, and a review of performance.

TRANSFERABILITY

On April 22, 1975, the Policy Committee of AASHTO also recommended that transfer of funds should be permitted between urban and rural Federal-aid highway funds in a State upon the request of the State highway or transportation agency, with the certification of the Governor, and the approval of the Secretary.

Imbalances occur when large areas of low population density which are, in fact, rural in character, are included in urban boundaries. There may be insufficient urban funds to make improvements to roads in these rural-urban areas and meet other urban needs. A case in point is Keene, New Hampshire.

The other side of the coin shows where urban programs and projects cannot be brought to the obligation stage rapidly enough to prevent lapse of funds. Rather than lying idle, these funds could be transferred to projects that were ready to let elsewhere in the State.

You will recall that previously, limited transfer, in the amount of 20 percent, between these various categories of urban and rural, was permitted by Federal law under a similar setup to what we are now recommending.

CERTIFICATION ACCEPTANCE

State officials have been most disappointed with the certification acceptance procedures under section 117 of title 23 of the U. S. Code which were enacted in 1973, with the purpose of permitting State officials to discharge statutory responsibilities by certification without detailed Federal review. There are two basic problems with the current certification procedures: (1) the provisions of section 117 apply only to requirements imposed by title 23 of the U. S. Code, and do not authorize State officials to certify for other Federal requirements, such as those imposed by the National Environmental Policy Act of 1969, or the Uniform Relocation Assistance and Land Acquisition

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Policies Act of 1970; and (2) the administrative requirements of the Federal Highway Administration for certification acceptance agreements require a State to abide by detailed procedural and staffing requirements which many feel are more onerous than requirements for detailed Federal approvals.

Because of these problems, only three States, Georgia, Virginia and Pennsylvania, have elected to enter into a certification acceptance agreement with the Federal Highway Administration.

We believe that to be effective, certification acceptance should cover all Federal requirements, not just those imposed by title 23, and that States should not be required to substitute State red tape for Federal red tape. We believe that Federal interests can adequately be protected by Federal review of the performance of the States.

If certification acceptance cannot be made workable, any States would prefer a return to the pre-1973 procedures for acceptance of projects on the Federal-aid secondary system.

CLARIFICATION OF ENVIRONMENTAL CLEARANCES PROCESS

State administrators are of the opinion that environmental considerations in transportation programs must continue, as in the past, and be given proper emphasis.

However, they feel that guidance from Congress is needed to clarify NEPA, the Clean Air Act, Section 4(f) of the Transportation Act, and its modification in subsequent Federal-aid Highway Acts.

AASHTO endorses the expenditure of transportation funds, in reasonable amounts, to enhance and protect the environment, or protect the ecological balance, to protect parks and historical sites, to give adequate consideration to the socio-economic factors, to assure proper aesthetic treatments, and to incorporate sound conservation practices in the location, design, construction, maintenance and operation of transportation facilities.

It is strongly recommended that no Federal regulations or laws be made retroactive to any project which has received design approval from the Department of Transportation within three years prior to the effective date of the regulation.

All Federal requirements for statements regarding environmental protection, including but not limited to, those imposed by the National Environmental Policy Act, section 4(f) of the Department of Transportation Act, the Clean Air Act, the National Historic Preservation Act, the

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Coastal Zones Management Act, should be included in one environmental impact statement for the U. S. Department of Transportation. This statement should be circulated for expeditious review by interested agencies.

Federal law should be amended to provide a cut-off date after approval of the final environmental impact statement after which no suit may be brought to challenge such approval.

URBAN PLANNING

Urban transportation planning processes must be strengthened, and, at the same time, simplified in such a manner as to assure the continued leadership role and responsibility of the State in comprehensive transportation development within its borders. At the same time, the States have increasing responsibility to provide technical assistance and advisory services to their local units of government.

Many State and local officials have raised strong objections to regulations proposed by the Department of Transportation which would require one metropolitan planning organization, preferably the OMB Circular A-95 clearing house, to be the sole spokesman for local officials in the 3C process, and to have approval authority for projects. They believe that Federal dictation of such requirement for each urbanized area would not only represent bad policy, but also would exceed statutory authority.

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ENERGY POLICY

The American Association of State Highway and Transportation Officials recommends that in light of the increasing demand for more energy efficient transportation, a portion of any revenues generated by energy conservation taxes be earmarked for transportation projects. Since transportation consumes approximately a quarter of all energy used in the United States, it would seem appropriate that a minimum of 25% of all energy conservation revenues be returned by the Federal government and be devoted to transportation projects that meet the goal of conservation and development of energy resources.

While the American Association of State Highway and Transportation Officials supports the goal of energy conservation in transportation, it strongly recommends that provisions be included in enacted legislation to offset the adverse consequences that reduced fuel consumption will have on Federal, state and local programs. In general, state and local highway and transportation programs depend upon gas tax revenues as their major source of funding. Many states also finance a significant share of their other programs through gas taxes. In 1973, gasoline taxes accounted for 12% of all revenues received by state governments. A provision in any Federal legislation increasing gasoline taxes that would allow states the option to collect sufficient energy conservation taxes to make up for losses from reduced fuel consumption is recommended. For example, if a Federal energy conservation tax of 37¢ a gallon on gasoline were enacted, the states should have the option of imposing 5¢ of the 37¢ themselves in order to offset the anticipated reduction in state revenues that the Federal tax could be expected to cause. If the states did not collect the 5¢, then the Federal government would collect the entire 37¢ and deposit the revenues that the states would have collected in the General Fund of the U.S. Treasury.

A great variety of proposals are being made at the Federal level to encourage the conservation of petroleum and to improve the efficiency of the use of all of the nation's energy resources. These proposals include such measures as fuel allocations, rationing, import quotas and tariffs, and tax incentives for energy conservation. No matter what course of action is finally chosen as a means to achieve the national goal of energy conservation, it is apparent that the consequences will affect the transportation sector more directly than any other area of the national economy. Because transport availability is essential to a healthy and productive national economy, affirmative action is required to assure that the benefits which may be derived from any energy conservation program will not be more than offset by adverse and perhaps devastating consequences.

A successful energy conservation program must give proper recognition to the need for the maintenance and improvement of the nation's transportation facilities and systems. A combination of

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strategies must be employed, strategies which recognize the indispensable relationship of adequate transportation systems to a healthy national economy. The legitimate desire to reduce petroleum consumption, if not properly directed, may well lead to a disastrous deterioration of the nation's transportation facilities and systems.

The revenues which have historically provided the means to maintain and improve highway transportation have been derived primarily from motor fuel and other automotive taxes. Provision must be made, therefore, to replace lost revenues, if adequate highway, transit, and other transportation facilities and systems are to be provided. Not only must current funding levels be maintained, but they must be increased to provide additional capital for more energy efficient systems of transportation. The reduction of motor fuel tax revenues, the higher cost of petroleum products and inflation have already hindered transportation improvement programs in some States. This has had concomittant adverse effects on the general economy, employment and materials production. In other States, programs have been reduced to merely maintaining the existing transportation system in an attempt to preserve the tremendous public investments that have been made.

Local governments find themselves burdened with increased transport operating and maintenance costs and financially unable to improve basic transit facilities and services. This comes at a time when States and these local governments will be expected to assume the additional burden of providing new and improved energy efficient transportation facilities and services to their constituencies.

The transportation needs of the nation vary from State to State and region to region. Each require specific actions at the State and local levels if the maximum effectiveness is to be achieved consistent with the national objective of energy conservation. Such specific actions can be best implemented under the direction and leadership of the State governments, working with their local governments.

ENERGY EFFICIENT TRANSPORTATION

Transportation consumes a quarter of all energy used in the United States. Furthermore, over half of all petroleum products are consumed in transportation. It follows that substantial savings in energy consumed for transportation will contribute significantly toward our National goal of energy independence.

A more energy efficient transportation system can be achieved by undertaking investments which lead to substitution of more energy efficient modes for personal travel and goods movement. Increased urban congestion, deteriorating air quality, rising fuel prices have combined to increase the overall demand for public transportation, inter-city rail passenger travel and rail freight movement.

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As energy intensive modes of transportation become more expensive users can be expected to shift to more efficient modes of transportation. AASHTO recommends that a portion of the revenues from an energy conservation tax be earmarked for transportation improvement leading to energy efficient transportation systems. Since it is estimated that 25% of the nation's energy resources are used for transportation and since it is proposed that essentially all of the energy conservation taxes will be imposed on transportation related products, no less than 25% of those funds should be assigned to programs which will improve the effectiveness and efficiency of transportation facilities and systems.

MOTOR FUEL TAX REVENUES

Until recently motor fuel consumption has provided an increasing base upon which to impose highway user taxes. From 1963 to 1973, the annual increase in gasoline consumption ranged between five and six percent. In 1973, all States combined collected a total of \$7.6 billion in gasoline taxes. If tax rates existing in 1973 were extended to 1985 and if the traditional growth rate of five percent per year were to continue, the States would realize \$13.6 billion from gas tax receipts in 1985.

A number of factors have worked, are working, and will be working to reduce gasoline consumption. Last year (1974) the demand for gasoline outgrew available supplies. The situation was compounded by the Arab oil embargo. To avoid consumer rationing, the Federal government took action to reduce demand to a level consistent with available supplies. First, limited supplies were allocated to distribute the impact of shortages equitably. Second, the Congress reduced the maximum speed limit to 55 miles per hour. Finally, the Federal government launched a massive media campaign encouraging citizens to save energy and, in particular, to drive less. The result was the first decrease in motor fuel consumption since 1942.

Over the past decade attempts have been made to divert travelers from private autos to public transportation to reduce congestion, improve air quality, and only incidentally to encourage the reduction in the demand for gasoline. Improving public transportation services has now crystalized into a clear cut energy conservation objective that may ultimately lead to further reductions in the demand for gasoline. Implementation of proposals that would encourage increased gas mileage through small vehicles and more efficient engines, or any of the variety of fuel tax proposals, would further reduce the demand for gasoline. This would, however, further reduce revenues to states and local governments to provide essential transportation services.

Studies by the Federal Energy Administration show that the net result of increased automobile efficiency, reduced speed limits and associated price increases due to import taxes will be a reduction of the rate of annual growth in gasoline consumption for auto driving from a range of 5 to 6 percent over the last decade to a range of 2 to 3 percent per year over the next ten years. Assuming the 1973 gasoline tax rates were to be extended 10 years into the future the States would collect a total of \$8.8 billion in 1985 - \$4.8 billion less than the \$13.6 billion predicted in 1973.

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This corresponds closely with other results. Studies by the U.S. Department of Transportation provide conclusive evidence that reductions in speed reduce fuel consumption. Test trucks consumed approximately 13% less fuel when operated at 50 miles per hour as opposed to 60 miles per hour. Test automobiles also consumed approximately 10% less fuel when operated at 55 miles per hour as opposed to 60 miles per hour. Assuming that the 55 miles per hour speed limit were strictly enforced, 1985 motor fuel collections by the States would be reduced from this factor alone by as much as \$1 billion.

The goal of improving weighted average fuel economy in new cars 40% by 1980 will have a similar impact on gas tax revenues. According to Robert Hemphill, Associate Assistant Administrator, Federal Energy Administration, in testimony before the House Committee on Ways and Means, achievement of this goal would result in a 29% reduction in new car fuel consumption. Again, when translated into gas receipts no longer collectable by State governments, the amount comes to over \$1 billion per year by 1985.

Finally, a variety of proposals have been advanced that would increase the price of gas anywhere from 5¢ a gallon to 37¢ a gallon. If a 25¢ per gallon tax were imposed, a 8.2 percent reduction in fuel consumption would be realized by 1985. This assumes a decrease in fuel consumption of 0.09 percent for each 1.0 percent increase in the price of gas. This compares with a 0.13% decrease per 1% increase in the price of gasoline resulting from the embargo last year! The effect of this action on State gas tax receipts when added to the impacts of other events and proposed actions is to reduce the total annual collections by the States in 1985 to less than \$8 billion, or \$5.6 billion less than what they would have collected had trends in the late sixties and early seventies continued, and had decisive Federal actions not been taken to reduce fuel consumption.

In summary, the consequences of the Arab oil embargo and other steps being taken and proposed to conserve energy will have a devastating effect on Federal, State and local programs dependent on gas tax revenues as a source of funding. In 1973, the 50 States collected \$7.6 billion in gasoline taxes. By 1985, proposed energy conservation plans will hold this to less than \$8.0 billion for a virtual zero percent (0%) growth factor. In 1973, four States depended upon gas tax receipts for more than 20% of their total State revenues. The Congress must include provisions in any energy conservation legislation to offset these losses in State revenues, if State programs are to remain sound.

The American Association of State Highway and Transportation Officials recommends that a sufficient amount of whatever revenues are realized from energy conservation taxes be turned back to the States, to maintain status quo with respect to conditions in the late sixties and early seventies. Preferably, the States would be given the option of collecting and using such taxes, with taxes to be collected by the Federal Government should a State decide not to exercise this option. The amount of this turn-back should be such that an overall five percent per annum growth in gas tax revenues is realized, assuming 1973 State gas tax rates.

TABLE 1. GAS TAXES AS SOURCE OF STATE REVENUE
(\$ MILLIONS)

<u>State</u>	<u>1973 Tax Per Gallon of Gas</u>	<u>1973 Gas Tax Revenues</u>	<u>1973 Total Tax Revenues</u>	<u>Gas Tax Revenues A Percentage of Total Tax Revenue</u>
Alabama	7c	130	628	15.7%
Alaska	8c	9	79	11.4%
Arizona	7c	81	628	12.9%
Arkansas	8.5c	97	536	18.1%
California	7c	715	7010	10.2%
Colorado	7c	89	636	14.0%
Connecticut	10c	131	1065	12.3%
Delaware	9c	27	306	8.8%
Florida	8c	336	2400	14.0%
Georgia	7.5c	211	1263	16.7%
Hawaii	5c	14	304	4.6%
Idaho	8.5c	37	234	15.8%
Illinois	7.5c	354	3471	10.2%
Indiana	8c	220	1419	15.5%
Iowa	7c	110	821	13.4%
Kansas	7c	85	491	17.3%
Kentucky	9c	150	898	16.7%
Louisiana	8c	138	1095	12.6%
Maine	9c	47	281	16.7%
Maryland	9c	163	1381	11.8%
Massachusetts	7.5c	177	1967	9.0%
Michigan	9c	402	4061	9.9%
Minnesota	7c	137	1557	8.8%
Mississippi	9c	108	624	17.3%
Missouri	7c	177	1073	16.5%
Montana	7c	31	162	19.1%
Nebraska	8.5c	74	351	21.1%
Nevada	6c	23	146	15.6%
New Hampshire	9c	35	150	23.4%
New Jersey	8c	252	1775	14.2%
New Mexico	7c	47	351	13.4%
New York	8c	466	8034	5.8%
N. Carolina	9c	244	1525	16.0%
N. Dakota	7c	23	164	14.0%
Ohio	7c	348	2522	13.8%
Oklahoma	6.6c	103	656	15.7%
Oregon	7c	84	592	14.2%
Pennsylvania	8c	383	3755	10.2%
Rhode Island	8c	30	297	10.1%
S. Carolina	8c	116	789	14.7%
S. Dakota	7c	26	110	23.6%
Tennessee	7c	156	918	17.0%
Texas	5c	358	2613	13.7%
Utah	7c	42	313	13.4%
Vermont	9c	22	179	12.3%
Virginia	9c	217	1315	16.5%
Washington	9c	151	1218	12.4%
W. Virginia	8.5c	65	533	12.2%
Wisconsin	7c	146	1759	8.3%
Wyoming	7c	19	85	22.3%

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In order to maintain the "status quo", in terms of revenue levels for state and local programs, we support the inclusion in any federally mandated energy conservation tax program the provision for the States' to initiate an increase of their own in an amount necessary to maintain currently expected State and local revenues from this source. If a State elects to raise its State gasoline tax, the State's tax per gallon would be deducted from the overall amount imposed by the Act.

Federal transportation programs depend on revenue from motor fuel taxes and excise taxes on vehicle related manufactured products. Proposals are being discussed concerning the Federal-aid Highway Act of 1975 which are intended to provide funds for alternative transportation facilities required to meet trip demands resulting from decreased automobile use. Any substantial reduction beyond those contemplated by the current revision proposed by the Energy Conservation Act will require an increase in revenues to offset the additional losses in Federal revenue. The current proposal to maintain an effective funding level for Interstate System completion from the Highway Trust Fund requires continuation of current level of excise taxes.

In closing, even with vehicles traveling at 55 miles-per-hour, rather than 65, with automobile efficiencies increasing substantially, and with a national goal of reduction in use of petroleum, there still will be a need for facilities to move from Point A to Point B.

Even if some new fuel is found which would totally replace gasoline, rubber-tired transport would still be the basis of the majority of America's movement, and we will still be called upon to provide the bridges and roads between these points to accommodate a growing America.

Thank you, Mr. Chairman, for the opportunity to appear before you today, and we will be pleased to answer any questions which you might have.

Senator BENTSEN. Commissioner Ritchie, we are very pleased to have the chairman of the full committee here with us this morning. He has many other responsibilities, starting early this morning and late last night. He is an authority in this field and has long evidenced his interest. I would like to call on him now.

Senator RANDOLPH. Mr. Chairman, I am appreciative of your understanding of my absence for other meetings this morning. I am gratified to join with you and Senator Stafford and others of the Subcommittee on Transportation who are able to be here today. I think the current hearings are necessary as we attempt to write a well reasoned and a fair Federal-aid highway bill this year.

Pardon me if I refer to Bill Ritchie as Bill. He occupies the dual position, as West Virginia Highway Commissioner and President of the American Association of State Highway and Transportation Officials.

I take note of the fact that that association used at one time the word exclusively highway and then, on its own initiative, changed the name to highway and transportation officials. I think this is very important to mention because it does indicate that the transportation problems of America, even with an association such as is now testifying through Mr. Ritchie, is obligated to think in terms of highways in relationship to other forms of transportation in the country.

We have also changed the name of our Subcommittee on Roads to the Subcommittee on Transportation in this body. I will take a moment here, to say that we had the same situation with our Subcommittee on Rivers and Harbors and Flood Control. That is expressive, but we changed it to Water Resources because there are so many connecting programs; programs that mesh one into the other. We do not want to isolate ourselves even though we have expertise and knowledge in certain areas.

Mr. RITCHIE. In the fiscal year just ended, West Virginia did, Mr. Chairman, place \$154 million of highway construction under contract. I don't know whether that would put us five, six, seven, or eight in the list of States, but it was a very high ranking and more than half of this now, \$87 million was made available by the release of the impounded Federal funds.

Senator RANDOLPH. In addition to your duties as West Virginia Highway Commissioner, you have taken, Bill, the added duties as the head of AASHTO. So you share your knowledge with a larger family of transport leadership. The Federal highway program is a mature activity. Certainly, it has been carried on for a long time. I think it has been generally carried on by well organized and experienced State highway departments.

As we give increasing attention to noninterstate road needs, I have been considering, Mr. Chairman, the merits of giving the States a substantial amount of the responsibility for highway construction. I have discussed that publicly in meetings 2 years ago and since.

We are not dumping something in your laps, but we are feeling that perhaps there could be a lesser bureaucracy, to use the term not in any odious sense, but that complex program which is now in operation might become less complex if the States were to go into the type of proposal that I am mentioning, rather than to lean so heavily on the decisions in Washington.

Mr. Ritchie, would you comment?

Mr. RITCHIE. Thank you, very much, Senator.

I think that all States would agree that this would be a good direction to head in because we did agree with the proposal of certification acceptance. The problem that we ran into, I think the reason that we only have three States availing themselves of that provision of the Highway Act, is because the certification acceptance only applies to title 23 and not to the total requirements that we have as far as the other provisions from the Federal Government.

I think the secondary procedure or the secondary roads program that we used on secondary Federal-aid highways worked well, was entirely acceptable to the Federal Government as well as the States and I think if we put the certification acceptance in that posture of the secondary system acceptance program, that it would work tremendously well, as the Senator has recommended, and still have the same quality of highways that we now have under the full Federal guidance and control.

Senator RANDOLPH. We have received, I would say, many negative comments on the realignment of the Federal-aid secondary system in rural highway hearings. That, Mr. Chairman, was earlier in the week.

What is the AASHTO official position as to that criticism? What would be the effect of deleting the work "major", from regulations that concern rural collectors under the realignment procedure?

Mr. RITCHIE. I think that as we have stated, Mr. Chairman, in our position, we are now in the process of realigning the Federal system as a part of the provision of the last highway legislation. I think that we would support the inclusion of the major routes, although I think careful consideration should be given to the problems of the rural areas, of the cities and the counties because they have the same problem that the Federal Government and the States do as far as the funding level.

I can understand clearly their concern over funding, for improving these highways without Federal aid. I think that every State will consider this in the realignment of the highway system, that we will consider that they have the same problem that the State does in the States where the counties are responsible for the local routes.

Senator RANDOLPH. Mr. Chairman, I am not sure that you are having a 10-minute rule for questioning this morning. I will ask a few more questions and then I will come back to you and Senator Stafford.

The administration proposal calls for a split interstate apportionment between routes of national significance and routes of local importance. How much involvement with the States has in the making of the decisions as to which routes will qualify for these two categories? What procedures would you use to perhaps determine the priorities within the States?

Mr. RITCHIE. Senator, as you know, in our State, our priority for interstates has been that we build them as fast as we can get them ready and whatever one is ready is the one we build.

Senator RANDOLPH. We have been doing that because we need them.

Mr. RITCHIE. Yes, sir, extremely badly. I think that it is good that we are beginning to consider the connecting parts and I think if we could get ourselves in the posture that we could build the highways

that are ready to go and fund them fully, then we will accomplish the purpose of completing the Interstate System.

I think this demonstrated itself by the States being able to obligate the apportioned funds that you were able to have released. I think we obligated somewhere in the neighborhood of a little under \$8 billion in a short period of time, but in doing that, the States that were ready to go to contract exhausted their apportionments for 1976, such as we did in West Virginia. Now we have no program because we don't have an apportionment.

But I think if we could address the problem of going ahead with the sections that we can build and accelerating that part of the Interstate System, it would help extremely in this country as far as unemployment, as far as the saving of gasoline and energy. We can do it in many of the States.

Senator RANDOLPH. Many of these considerations which you mentioned could well apply to Interstate 79 which moves from north to south across West Virginia. It is my understanding, Mr. Ritchie, that within a few days there will be a formal opening of that road in Pennsylvania and that road, Mr. Chairman, to you and Senator Stafford, we consider frankly as a lifeline in our State.

It will run from Pittsburgh, on the north, through to Charleston, W. Va., our State Capital, on the south. It opens up the country that, very frankly, has been isolated and, Mr. Ritchie, for the record only, what will the travel time—as it was before the road was begun and now as the road will come into use—be for a person driving from Pittsburgh to Charleston or Charleston to Pittsburgh?

Mr. RITCHIE. The travel time has been reduced, Senator, from 7 to 3 hours.

Senator RANDOLPH. That means very much to the shipper. It means something to the businessman and businesswoman. It means something to the family on a vacation. It means something from the standpoint of a lesser amount of gasoline that is consumed. Is that right?

Mr. RITCHIE. Senator, in our estimates of road user benefits on that particular section of highway, even though it did average \$3 million a mile to construct, we think the road user benefits are somewhere in the neighborhood of 8 to 1 as far as the cost of the highway compared to the benefits in a period of 10 years.

The road user benefits that we estimate, even though the highway cost \$3 million a mile, are somewhere in the neighborhood of 8 to 1 in a period of 10 to 15 years, which is a tremendous benefit.

Senator RANDOLPH. This afternoon, Len Arrow, director of the Highway Action Coalition, will be one of our witnesses. It is my understanding from the record that he is giving to us that he will state that under current law, urbanized areas are responsible for development of comprehensive transportation plans, but not given authority to select projects because the State transportation agencies control the money; that is, you, the State highway department, in whatever State.

I think it is important before you leave the witness stand, thinking in terms of Mr. Arrow's comment that will come this afternoon, that you answer that statement which in effect will be made.

Mr. RITCHIE. Senator, I can really only speak knowledgeably of the way the planning process works in our State. Our planning representatives of the highway department attend the meetings of the planning agencies in our State. We accept their recommendations.

We work with them under the Federal guidelines as far as inclusion of their recommendations into the projects. I think we do provide a leadership of sorts as far as the funding, as far as the coordination of the planning in the various areas as compared to the State planning organization.

I think that we do accept and we do construct projects that they recommend and that they suggest to us. We do make suggestions to them as far as the statewide planning process concerns the local planning process or connects with us.

Senator RANDOLPH. Do you feel that, insofar as possible, the projects selected within a State should be, although there must be a highway, must be by those who are charged with the responsibility, such as you, to carry on the major programs?

Is there a desire on your part and other State highway officials to call into the counseling process the people who are involved in not only the highway construction, but people affected by the road?

Mr. RITCHIE. Yes, sir. I think this is accomplished in our public hearings, very definitely. I think that we also need to remember that we have elected officials from each of these areas that have a very definite input and have a very definite right, I think, as representatives of the people to have input into the planning process.

Senator RANDOLPH. Does that include city as well as county?

Mr. RITCHIE. City as well as county as well as the State legislators; yes, sir.

Senator RANDOLPH. Secretary Coleman has indicated that \$11 billion in highway funds will be available during fiscal year 1976 and he says that is too much money. He has suggested alternatives. He proposes the following, in essence: establishing an obligation ceiling of \$8.5 billion for fiscal year 1976 and the 3-month transition period. He also proposes that this be done through the appropriations process here in the Congress.

The administration, in return, would not send deferral messages to Congress and that he would apportion fiscal year 1977 interstate funds to the States as soon as the necessary congressional action would be taken.

It is my understanding, Mr. Chairman, that the \$8.5 billion is for 15 months and that would be equivalent to \$6.6 billion as a program for 12 months. So the figure here of \$8.5 billion for 1976, is an interesting statistic, but for the 12 months in fiscal year 1975, we did have obligations of more than \$7.8 billion. A \$8.5 billion program in the 15-month period would be a reduction in the coming year.

Would you comment?

Mr. RITCHIE. Yes, sir. I think, as you point out, we are in a 15-month year this year as far as the money is concerned. I think the States demonstrated, as we have mentioned, in obligating the \$7.8 billion that we have the capability within the State to obligate it. We also have, I believe, 20 States that entered in a suit for release of the apportioned funds to the State. I think that would indicate that the States can obligate the money to the extent that it had been authorized by Congress, without any question.

I think that it points up particularly the problem that our State as well as several States, I believe 16 now, if I am correct, have obligated all of the 1976 apportionment by the first of July of this year. So that no more interstate construction, no more of that in that category can

be accomplished until new apportionment is made. That presents a difficulty to many States.

Senator BENTSEN. Commissioner Ritchie, I think the chairman of the full committee has developed the line of questioning very well, concerning your testimony and I have no further questions.

Thank you, very much, for your contribution.

I am a little concerned about our timing this morning because we have a quorum call on the floor. That means we will probably have votes coming soon. So I would like to ask the rest of the witnesses to please come to the witness stand and—thank you, Commissioner—that will be Mr. Ralph Tabor, National Association of Counties, Mr. Michael Lazar, commissioner of transportation, New York City; Mr. J. P. Coupal, Deputy Administrator of the Federal Highway Administration.

STATEMENTS OF RALPH TABOR, NATIONAL ASSOCIATION OF COUNTIES; MICHAEL LAZAR, COMMISSIONER OF TRANSPORTATION, NEW YORK CITY; AND J. R. COUPAL, DEPUTY ADMINISTRATOR, FEDERAL HIGHWAY ADMINISTRATION

Senator BENTSEN. Gentlemen, we are very pleased to have you before us this morning. I would like to ask Mr. Lazar, commissioner of transportation for the city of New York to proceed first, please.

STATEMENT OF MICHAEL LAZAR, COMMISSIONER OF TRANSPORTATION, CITY OF NEW YORK

Mr. LAZAR. Mr. Chairman, members of the subcommittee, my name is Michael J. Lazar, transportation administrator of the city of New York and a past member of the Transportation Steering Committee of the National League of Cities.

On behalf of Abraham D. Beame, the mayor of the city of New York, the National League of Cities, and the U.S. Conference of Mayors, I want to thank the subcommittee for this opportunity to present the views of the Nation's cities on "The Federal Role in the Highway Program."

The National League of Cities represents approximately 15,000 municipalities through a combination of direct memberships and a network of State municipal leagues. The U.S. Conference of Mayors is the national spokesman for virtually all cities with a population in excess of 30,000, as represented by their elected chief executives. They wish me specifically to note approval of the innovative approach of the subcommittee in its 1975 Highway Act hearings.

The call for this day requests a concentration on intergovernmental relationships as they should prevail under a new highway assistance program. That is a most appropriate directive because the No. 1 priority for the cities in the 1975 Highway Act is a fundamental change in the Federal-aid urban system program and the intergovernmental administration of it, so as to provide apportionment of \$1.5 billion of urban system funds directly to the urbanized areas in block grant fashion to achieve local program control. This would allow the Federal dollar to return from whence it came with minimum diversion and maximum benefit.

The FAUS program was initiated in the 1970 Highway Act, but provided only \$100 million per year. In the 1973 act, the cities sought equity and flexibility for this program and funding was set at \$800 million per year. Nevertheless, only 11 percent of streets and highways in urban areas are eligible for Federal aid as compared to 25 percent of all rural roads. But not even this inadequate ratio is maintained in actual projects.

In 1973, for example, 2,192 miles of urban streets and highways had Federal-aid construction projects as compared to 27,146 miles in rural areas. And I believe these statistics are better viewed in light of the fact that more than two-thirds of our Nation's people live on just one percent of the land, that is, in our urban areas.

This density is reflected in the fact that the heavily traveled roads and, therefore, those most in need of assistance, are overwhelmingly in the urban areas. Of all noninterstate roads carrying 30,000 or more vehicles per day, only 68 miles are in rural areas, while 1,347 miles are in urban areas, a 20-to-1 ratio. Of roads carrying less than 30,000, but more than 15,000 vehicles per day, the ratio is 7 to 1.

In this regard, I believe that it is very important to note that the urban system program is really the urbanized area system program—the greater metropolitan areas of cities. They do not include only the cities, of course, but their suburbs as well.

None of this is to say rural assistance is too high. It is rather to say that urban assistance is too low and that is especially true when viewed from the intergovernmental relationship dimension of the problem. That can be succinctly demonstrated.

Of the \$1.8 billion authorized under the urban system program pursuant to the 1973 act, for fiscal years 1973 through 1975, only \$635 million has been obligated in urban areas. Moreover, even where funds have been obligated, the intent and spirit of the legislation to address local needs and local priorities has been undermined. This is due directly to the intergovernmental road urban system funds and urban decisionmaking must traverse.

Under current arrangements, the Federal Government apportions FAUS to the States, who in turn apportion the funds to their urbanized areas. The suballocation formula is not always reflective of actual need, nor is it always fair. More importantly, under the law, the State highway department must approve all local programs and projects in great detail before the projects are forwarded to the Federal Highway Administration for similar review, approval and, finally, obligation. This creates an extremely burdensome proliferation of redtape and avoids ultimate responsibility.

Ironically, the 1973 Highway Act states it is congressional policy to avoid such bureaucratic impediment. But I can assure you it accomplished exactly the opposite. In New York City, where unlike most cities there exists a highly skilled and a great historical and sophisticated State-city relationship, 20 major FAUS projects were finally agreed upon in September 1974, following a year of negotiation.

As of this date, almost a year after that agreement, not one project has moved to final design approval, much less to construction. The reasons include the imposition of rigid State construction standards and guidelines on city street projects and then the imposition of as

equally inflexible and not appropriate Federal guidelines and standards.

Had there been at least a direct relationship between the city and the Federal Government on project implementation, a year's delay could have been avoided. I might add as well, parenthetically, this occurred during the very time the administration sought to release funds and see construction go forward and employment go forward, indeed in increased numbers. During this very vital and critical period, these projects lay dormant.

Such delays illuminate the fact that State and Federal inflexibility compels cities to comply with procedures, regulations, and construction specifications which do not reflect the realities of urban streets and highways. I think it is well to remember also that over the decades when there was no urban system assistance, the cities developed considerable highway construction expertise. I think the cities should be allowed to continue to do their thing.

However, there is a more serious intergovernmental problem with FAUS. Not only have the States administered the urban funds, they have competed for them. The staff of the National League of Cities and the U.S. Conference of Mayors has begun documenting its study of the implementation of the urban system program. It shows that the State's approval power—its veto power—puts it in a unique and favored position in the programming of local funds; it can demand that its preferred projects be funded regardless of local priorities.

Frequently, this has led to the redesignation of primary system routes as urban system routes. Thus, urban systems funds are being used on truly primary systems projects despite local opposition thereto. To be able to set an example of that, I would suggest, Mr. Chairman, that in New York City, we have a project called the West Shore Expressway. It is all contained within the Borough of Richmond, the least populated borough of the city and it is that project and only that project that the State moved under the FAUS program. This \$17 million project, which I am sure is a valuable one for future growth of our community, but it does not at all rival the necessary and immediate needs of the other projects which we designed and submitted to the State almost 2 years previously.

That is an example of why there must be local input, there must be direct apportionment in the urban and urban extension funding under the proposed Highway Act. These inequities, if I may suggest, can be and should be rectified. The conference and the league, therefore, make three specific recommendations on which it places the highest priority.

There should be a direct apportionment, as I have said, of the urban system funds to the urbanized areas. This would eliminate the duplication, the redtape, the competition, the bogging down of the procedures of design and approval.

There should be a streamlining of noninterstate categorical Federal highway assistance into a basic division of rural assistance and urban assistance with separate safety and beauty programs to cut across all federally assisted highways. In this particular regard, the league and the conference embrace the administration's consolidated program approach. It is sensible and useful.

With particular reference to FAUS, it would prevent States from financing urban extension primary projects out of urban funds. Moreover, the bloc grant approach means, simply, that assistance can be spent according to local needs and priorities.

The urban system funding level should be \$1.5 billion per year. The current act funds urban categories at \$1.1 billion, \$800 million under the FAUS program. The density of urban areas, the enormity of urban needs and the ill effects of inflation in highway construction costs—61 percent for the period 1971 to 1975—make \$1.5 billion hardly an unreasonable request.

In conjunction with direct apportionment, I wish to note that such a program is the essence of regionalism which is an accepted transportation principle. It gives funds, decisionmaking power and program control to the urban regions. That such a program is workable is being dramatically demonstrated by the section 5 program of the National Mass Transportation Assistance Act of 1974, which apportioned aid directly to the urban regions.

In 3 months, January to March 1975, every major urban region in this country reached agreement on how to divide its region's share. In the New York City region, for example, the New York City public transit system, the city's private bus operators, which incidentally considered alone is a transit system larger than those in Pittsburgh, Baltimore, or Detroit, all surrounding counties and their bus systems, the commuter railroads, the city of Long Beach and the State quickly decided on a subdivision of funds through UMTA's designated recipient mechanism. Agreement was similarly reached for fiscal year 1976. So it works. There are local options which work and local cooperation in the past several months which proves it will work.

The same is true for the city of Los Angeles and if this approach can work among the diverse jurisdictions there, it can work anywhere. This is to say simply that the argument made 2 years ago in the 1973 Highway Act amendment that direct apportionment will not work because there is no one to receive the money is a specious argument.

In fact, the case can be made that the opposite is more nearly correct. Pursuant to the UMTA program, States are the designated recipients for urbanized areas under 200,000 population. There are 173 such areas. Funds were obligated for only 25 of these areas, representing 10 percent of the available funds. In areas 200,000 or above, which is the demarcation between the urbanized areas for the designated recipients of the UMTA funding, 60 percent of the funds available were moved in those first 3 months.

I would be happy to submit a written appendix containing further documentation and suggested statutory language on this point. I hasten to add now that direct apportionment of urban systems retains the State as a full partner in the planning process and in selection of designated recipients. It, of course, retains the historical and the legal inputs which the States have into city matters in other respects.

Mr. Chairman, I would like to make two more specific recommendations and then briefly respond to some of the specific questions you pose in your letter of invitation. My first recommendation concerns maintenance. Last spring, the FHWA under House pressure agreed to construe the definition of reconstruction loosely so as to include rehabilitation projects. The administration's bill follows up on this.

It should include resurfacing. I urge the subcommittee to take a hard look at this question and to include major maintenance projects as fundable. We will be happy to send the committee draft language on this issue.

The cost of maintenance of our highways is an overwhelming burden on the localities, the counties, and the cities. The costs attendant to maintenance and rehabilitation are overwhelming and I might also add that the allowances in State-city relationships for maintenance and resurfacing are unreasonable and irrational. They don't relate to the cost of maintenance once the city takes on the responsibility of maintaining the local highway, street or any urban extension of the street system.

The second recommendation concerns the certification of acceptance process. The 1973 act took a step toward reducing redtape by allowing the FHWA to certify State highway departments to process noninterstate projects. This should be expanded to allow basic design and construction engineering determinations to be made by the local government, once the responsible officials are properly qualified and certified. Local governments which do not have such capability could contract with the State to provide the technical assistance; but the work would not be duplicated. Here again, let the cities do their thing.

In the call of this hearing, Mr. Chairman, you raise certain questions including whether there is a continuing Federal interest in the construction of interstate and noninterstate systems. The cities think there is. The national objectives concerning the environment, energy, the people's inherent right to mobility and the contribution transportation makes to the quality of life and social justice can be well served by a Federal highway program and this is particularly true with flexible assistance that allows recipients to use Federal funds where they are most required be it for new highway development, preservation of an existing highway plant, or mass transit investment, bus, light-rail, passenger facilities, water borne capacities, as well as intermodal connecting facilities. The problem of mobility varies with each community, but the responsibility of government to provide it does not. The National League of Cities and Conference of Mayors is where the responsibility lies. So should the decisionmaking lie, as well.

Urban systems began in 1970 with no real funding until fiscal year 1974. There was no real Federal mass transit funding until 1970 and most of that went to only a few cities. Thus, one of the very real functions that is and should be exercised by a totally flexible urban system program is to redress severe funding imbalances of the past, not for the sake of equity alone, but for the sake of the national objectives served. In doing so, in bloc grant fashion, the Federal role is a clearly supplementary one—a necessary complement to the leadership role the cities and counties have always played.

For example, in 1973, not counting user charges, the Federal Government provided \$1.1 billion in highway assistance and the States, \$1.6 billion. At the same time, the cities provided \$3.3 billion and the counties provided \$1.6 billion, for a total of \$4.9 billion for highway programs. That is why Federal assistance should not be imposed as a categorical program. It is the tail and not the dog.

You also asked, Mr. Chairman, in which areas should administrative authority be returned to different levels of government. The return of administrative authority to the urbanized areas is the major theme of my statement because administrative authority is actually program control.

Within urbanized areas, the implementors of projects should have that authority as expressed through the designated recipients and the 134 planning process. As a general rule, the State should have authority in rural areas and the designated recipients in the urbanized ones. It is the absence of this authority in the last 3 years that prevented most urbanized areas from attempting to use FAUS for mass transit as the Congress intended.

With reference to your other questions, I believe my testimony answers most of them. In general, the cities favor the administration's approach, particularly noteworthy is the consolidation of categories and the interstate classification and transfer scheme.

The case for the interstate transfer was made by the Congress 2 years ago, but administrative interpretations have greatly discouraged it. But if funds are transferred at a 90 percent Federal ratio based on current cost estimates and made available for immediate obligation for highway and transit projects, then in one swift and bold move this Congress will have given some true transportation flexibility to the Nation's cities.

There is extensive interstate mileage—much of it end point designation—unbuilt in urban areas. There are many cities that do not really want it and certainly do not need it. By virtue of an attractive transfer provision, these cities can build boulevards and parkways instead of massive interstates, and have obtained substantial mass transit funds as well.

The incredibly expensive and increasing cost of the interstate will be eased and immediate transportation relief and the jobs that go with it can be brought to the cities. Moreover, since the administration has sought this provision, we can be sure they will implement it.

I submit that to be a real national objective. There is no greater energy crisis than the loss of the vitality of our cities. You have before you the opportunity to make a helpful change and the cities applaud your enthusiasm for the task.

Senator BENTSEN. Commissioner, you have eloquently stated the case of the major cities and the very serious problems they are having in transportation and funding and keeping their streets and highways in reasonable shape.

I am not going to go into questions at this time, because I see we have a vote scheduled; but I would ask that each member, when we do get to these questions, limit themselves to 10 minutes so we can give each one an opportunity to speak.

I will call now on Mr. Ralph Tabor, National Association of Counties and I for one will go vote and then come back.

Mr. Chairman?

Senator RANDOLPH. I suggest that perhaps Senator Buckley might wish to comment on the testimony of the administrator from the city of New York.

Senator BENTSEN. I think that is fine, Mr. Chairman.

Senator RANDOLPH. It might help both of them.

Senator BENTSEN. I think that will be fine. I hope we won't get into serious questions at this time.

Senator BUCKLEY. Unfortunately, because of conflicts, I wasn't able to be here at the beginning of your testimony. It seems to me what Mr. Lazar is saying makes total commonsense in restoring responsibility to those officials who are in the best position to determine what the transportation needs are of the people.

I want to congratulate him on a very fine statement.

Mr. LAZAR. Thank you, Senator.

I want to also indicate for the record that Councilman Louis Nowell of Los Angeles will wish to file a statement to be included in the hearing record, Mr. Chairman. I would like to make that a matter of record. [See p. 1259.]

Senator RANDOLPH. I never knew a man that asked less questions of his hometown associate.

Senator BUCKLEY. I was enjoined by the chairman of the subcommittee not to get into a colloquy.

Senator RANDOLPH. Are you going to come back?

Senator BUCKLEY. Yes. I appreciate your courtesy.

Senator RANDOLPH. Mr. Lazar, I have listened very carefully as you gave your testimony. I have read it earlier. There is one place where I think we should have comment. In the 1973 Federal Aid Highway Act, we thought we were doing exactly what you have said is not being done.

If that is the fault of the Federal Highway Administrator under the Department of Transportation, I am not going to say this morning because I don't know, but what you point out here is something that we thought we had provided for. Your statement here—I want to get the language.

Mr. LAZAR. Are you referring to the \$635 million obligation?

Senator RANDOLPH. It says:

Frequently, this has led to the redesignation of primary system routes as urban system routes. Thus, urban system funds are being used on truly primary systems projects despite local opposition thereto.

One of the agonizing points of our 1973 discussions before the bill was finally reported from the committee and to the Senate was going into this matter of passthrough. That was a very important matter that we were discussing. Apparently something has happened and the intent of the Congress has not been carried into action. I feel this.

Mr. LAZAR. I would like to make an observation to that, Senator.

Senator RANDOLPH. Yes, sir.

Mr. LAZAR. For one thing, the system, the urban system to which we refer, of course, became a responsibility for specific designations of State highway departments. So the urban street system which we have under the program was created by the State department of transportation and not the act of the local authority.

Senator RANDOLPH. But we said in the act that the system as you refer to, the urban system, would be a part of the decisionmaking of responsible local authorities. That is what in essence, we said. You say that is being violated?

Mr. LAZAR. It was violated, I am sure, in spirit at the outset when the very mapping of the system took place under State direction for the first thing. Second, the State, certainly New York State, I can

only speak for New York State from a very personal experience, would somewhat confound the appropriation of the funds so that, for example, we found ourselves with FAUS moneys being used to eliminate grade crossings in a program which the State might well have obligated itself to do otherwise. That was another kind of aspect to the program, I think, that became self-defeating.

The implementation of the local street improvements which are arterial roads within the city, major indeed, in length, a major highway, was given some kind of different priority other than that which would have occurred if there was a direct apportionment factor built into the 1973 act.

I would also add in conclusion that I really never knew how much money was being allocated to the city of New York until most recently, 2 years after the act's passage. Where there was a distinct difference of opinion as to whether or not the FAUS dollars to the city would be something in the vicinity of \$115 million, as the State mentioned, or \$170 million, as we estimated them to be.

Senator RANDOLPH. Mr. Lazar, you raise some serious questions and it is our desire to find the answers. There is no reason whatsoever for a 2-year lapse of time until you knew what was being done. I don't know where the breakdown is, but there is a responsibility of this committee not only to write legislation, but to oversee the carrying out of legislation.

I hope the other gentlemen will return in a few moments. We will recess for a brief period.

[Brief recess.]

Senator BENTSEN. Gentlemen, if you will be seated, we will get these hearings underway again.

Mr. Tabor, will you present your testimony?

STATEMENT OF RALPH TABOR, DIRECTOR, FEDERAL AFFAIRS, NATIONAL ASSOCIATION OF COUNTIES

Mr. TABOR. Mr. Chairman, just for the record, I am Ralph Tabor, director of Federal affairs for the National Association of Counties.

I am accompanied by Sandra Spence, NACo legislative representative. In the interest of time, I would like to just summarize our position by reading some excerpts from our fairly lengthy prepared statement which we have submitted for the record. [The statement appears on p. 1237.]

Although our interests and concerns regarding highways and transportation are broad, we shall address our statement to the future Federal role in the highway program. In that regard, our official policy is quite simple.

We believe that 1 cent of the current 4-cent Federal gasoline tax should be retained in the highway trust fund for the completion of the Interstate System. We believe that the remaining 3 cents should be returned to States in proportion to collections—or highway use—in each State, to be used for transportation purposes as determined by each State along with its constituent local governments.

Let me clarify and expand on that simple statement. NACo membership has three reasons for urging the return of the noninterstate programs to State and local management.

First, because the completion of most new highway construction changes the nature of the role we believe each level of government should now play; second, returning control to State and local governments will reduce redtape and its associated cost; third, this change would increase the flexibility of State and local elected decisionmakers in the establishment of transportation priorities.

Mr. Chairman, the day of major new initiatives in highway construction on new rights-of-way is over. We are now struggling with the problems of maintaining and improving that basic existing national network of highways and streets which has been built since the first significant Federal financial assistance was provided in the 1916 Federal Aid Highway Act.

With 85 percent of our National System of Interstate and Defense Highways now open to traffic and the existence of a basic network of urban and rural roads, the remaining 15 percent of unfinished Interstate highways today constitutes the only incomplete highway system of significant nationwide interest.

We believe there should be a concurrent reduction in Federal program involvement with the reduction in emphasis on construction of new highways needed as part of our nationwide system.

NACo realizes the issue of redtape will be addressed by this subcommittee next week and we do not wish to belabor the point. However, we would like to call to your attention the special report, Red Tape III, that was prepared cooperatively by the County Supervisors Association of California, the League of California Cities, and the California Associated General Contractors, Engineering and Grading Contractors, and Federation of Labor.

We have attached this report as attachment B in our statement. I think that it is a documentation of the utter frustration that these groups have experienced since their first joint effort to deal with the redtape problem starting back in October of 1973.

We are honored today. We have a large contingent from California that represents all five of the groups that prepared this report and worked together. I think the seriousness of this question is shown by the fact that this diverse group could reach a consensus on what their problems were.

This group represents the second largest metropolitan area in the United States. It also represents rural areas. It is quite a collection of interests. I would just like to point out that they are in the audience because of their interest in the deliberations of this subcommittee.

Our proposal does raise some questions about the highway trust fund. The NACo membership voted as early as 1973 to support a concept which would allow highway trust fund resources to be spent for a total transportation program with local determination for the use of such funds for other modes of transportation.

This position was taken in recognition of the significant impact of the automobile and highways on public health, land usage, air quality, community development and more recently on energy consumption.

In calling for a return of the major share of the trust fund revenues to State and local government, we are not suggesting outright abolition of the trust fund for other than interstate purposes.

In fact, as we consider the options we would suggest that use of the trust fund as a mechanism for future funding is most appropriate

We can see great merit in use of the trust fund as a depository for transportation user tax revenues so long as significant funding is then returned to State and local governments for use on a local priority basis.

In spite of the criticisms of trust fund financing by certain management theories and Administrators who wish to retain constant control over revenues and expenditures, we believe such thinking is unrealistic in regard to the particular unique demands of highway construction and the other types of transportation finance, which require long-term commitment and assured continuity of funding.

Annual appropriations from general revenues simply will not give State and local officials sufficient expectation of future funding levels to allow the kind of engineering and fiscal planning that we need to build our Nation's highways.

Another question raised is the immediate impact of returning revenues to States. In regard to the redistribution effect, I would like to point to evidence we have in our testimony as attachment C that the return of gasoline tax revenues to States in proportion to collections would be less significant than it might have earlier been.

We note in a comparison of estimated State payments into the Trust Fund with Federal-aid apportionments from the fund in fiscal year 1974, the number of States which would suffer reduced apportionments as a result of our proposal was only 22, and only 17 States would lose more than 5 or 6 percent. If revenues had been shared in an amount proportionate to collections since the inception of the trust fund in 1956, 30 States would have lost money.

The point is that apportionments now are redistributing trust fund revenues to a much less significant degree than they have been heretofore, while ever-increasing redtape is costing our State and local governments untold millions of dollars. As a result, we believe our policy is justified in spite of the immediate impact on certain States.

Another question arises with our proposal about the Federal role if 3 cents is returned to the State and local governments. What legitimate role is left to the Federal Government in the further development and maintenance of our national transportation system?

As already stated, we believe the Federal Government should continue its efficient service as tax collector for revenues to be returned to State and local government.

We believe the Federal Government should continue its leadership in the joint preparation, with State and local assistance, of the national functional classification study to establish a primary system comprising major highways, including the Interstate, in both rural and urban areas; a secondary system comprising collector roads in rural areas; and an urban system comprising collector streets in urban areas.

It would be these systems which would be part of our overall national highway system on which revenues from the 3-cent gasoline tax could be spent. These systems would also provide a basis for establishment of broad national goals for assurance of an equitable split by States of funding between urban and rural areas.

We believe that Congress should establish broad national policy under which the Federal Government should develop broad-brush procedural guidelines and general postaudit compliance procedures.

Under such a system, State and local governments could comply with national policy and Federal requirements without the current project-by-project review and second-guessing of State and local priorities by Federal bureaucrats.

We believe the Federal Government should develop a meaningful procedure for certification and acceptance of State, city and/or county standards and requirements for purposes of meeting all facets of Federal requirements, including environmental reviews, prevailing wage requirements and equal employment opportunity requirements, where such State and local laws and procedures are equal to or greater than Federal requirements.

Other areas of appropriate concern to the Federal Government would include such activities as: coordination of highways with other modes of transportation to achieve the most efficient balance of transportation systems and facilities; special efforts to achieve national social and economic development goals through basic transportation systems, such as the Appalachian development corridor system and the national demonstration economic growth center development corridors; research and development efforts undertaken by State and local governments, universities, and private organizations.

Another one would be planning and coordination to assure appropriate interface of highways at State lines and resolution of similar interstate issues.

The State-local split in both degree of responsibility and functional nature, responsibility for highways and other forms of transportation, varies considerably from State to State.

In maintenance, local government disbursements nationally exceed State disbursements, while State disbursements are greater for such functions as right-of-way acquisition and construction.

The relative role of States and local units varies considerably, however, among the various States. Construction and maintenance of roads, highways, and expressways in Alaska, Delaware, North Carolina, Rhode Island, Virginia, and West Virginia are almost entirely a State function.

In Connecticut, Pennsylvania, Vermont, Massachusetts, New Hampshire, and Maine, towns or townships share road responsibilities with the State. In States such as Illinois, Minnesota, and Ohio, both counties and townships construct and maintain roads; townships tend to be responsible for farm-to-market roads while the counties are responsible for more heavily traveled roads. In most States, counties share significant highway responsibility with State agencies.

There are similar variations from region to region and between urban and rural in the relative roles of State and local governments in other modes of transportation such as airports and mass transportation.

We believe that the particular mix of State-local involvement in such matters is not an appropriate concern of the Federal Government. These relationships have developed out of the particular needs and traditions of our Nation's diverse State and local units of government over 200 years of our history.

Changes are occurring in response to the changing needs of our citizens, and such changes promise to occur even more rapidly during the next quarter century.

In conclusion, let me thank you for this opportunity to share with you the views of NACo on the future Federal role in the highway program. We urge that you give careful consideration to our recommendations, for we strongly believe that the significant replacement of State and local priorities for the current artificiality of priorities imposed by bureaucratic requirements and the existence of so many categorical approaches will rend our entire system much more responsive to the real transportation needs of the American public.

Thank you, Mr. Chairman.

Senator BENTSEN. Thank you very much, Mr. Tabor.

Mr. Tabor, you and the cities suggest that the redtape at the State level has impeded the highway funds for mass transit.

Could you be more specific? We had the Governors testifying earlier that it is the redtape at the Federal level. You are at the county level. You say it is the level just above you, that it is the State level.

Do you want to tell me about it?

Mr. TABOR. In our statement, Mr. Chairman, and also in this report we are submitting from California, most of the concern was about the Federal redtape. We have had similar experiences with representatives of the cities on the Federal-Aid urban system.

I think at this point most of our concern has not been with the State, but has been more with the Federal. Maybe Mr. Lazar wants to elaborate further on the State redtape involved.

Senator BENTSEN. That would be fine because, Mr. Lazar, you made some serious charges that the States have undermined in many ways the local priorities, in the use of urban funds by approving projects for State priorities, rather than with local priorities and specifically you have charged that the States have often used their urban funds on the primary system and have in fact been in competition, rather than cooperation with the cities.

In the 1973 act, we tried to avoid that, as you pointed out. These are serious charges and one that we are going to want UMTA to respond to, but would you elaborate on that?

Mr. LAZAR. To the extent that I have personal experience in that question, Mr. Chairman, I would like to point to a few situations. I always refer very quickly to the West Shore expressway. Only there my reference was to the very spirit of the act and not necessarily the legality of the avoidance of responsibility where in 2 years, Mr. Chairman, the only FAUS project approved by the State was an expressway which did not relate directly, immediately I should say to the needs of the city, which we considered a higher priority. That moved very rapidly.

On the other hand, the other 20 projects which we thought we had agreed with the States as being the next up, so to speak, that we have agreed on what those guidelines would be and how indeed we would implement those projects have not gotten off the ground during that same period of time.

One example of that which I would make now is the Ocean Parkway project. Ocean Parkway, as you know, is a major artery in the city of New York, approximately 6 miles in length, all within the Borough of Brooklyn. It is to be reconstructed.

It is an ideally suited FAUS project because it is on the map of the FAUS system which incidentally again was promulgated by the State, not the city. The State imposed its promulgation of what the system would look like within the city of New York.

That is the first problem that we had. Second, once we were able to keep sufficient control over which of those arterial roads and streets were to be designated on the system, we moved as rapidly as we could with the highest priority toward the streets with the highest priority, such as Ocean Parkway.

Ocean Parkway was designed in essence by the city somewhat over 2 years ago and then submitted to the State for design considerations.

After over a year of negotiation and communication and discussion with the State, we were told that the Feds did not establish their guidelines sufficiently to apply to this particular project.

The State had to work out those guidelines with the Federal Highway Administration and then come back to the city. Our position throughout was we would appeal, if necessary, directly to the Federal Establishment for an exposition of whatever guidelines suited and were more suitable, indeed, to the city of New York street system and not a primary or urban extension system.

It is now 2 years; public hearings, which only recently became imposed on the city, the public hearing requirement, although not clearly mandated in the 1973 act, have not yet occurred. The Feds took that position that this should have a public hearing format.

So we began the process of public notification for public hearings.

In essence, there has been a failure of communication between the Federal Establishment, the State Highway Commission, and the city of New York, and in that situation we sit without any of these priorities being met.

That is the kind of failure that has occurred as an outgrowth of the 1973 effort to give the cities a greater part of the share in highway moneys and, indeed, be able to decide for themselves what streets and roads should be given the highest priority.

Senator BENTSEN. I am trying to get the point clear here. We wanted very much in that 1973 act to give the cities control and authority over the expenditure of those funds, but we had the one caveat that we wanted to be sure there was a coordinated effort with the roads coming into that area. That is why we gave some authority to the States there.

How do you accomplish that objective and still avoid this delay? How could you do this? We want to give the cities the authority. We still want some reasonable coordination of the effort outside of the city.

Mr. LAZAR. Let me suggest, Mr. Chairman, that since the maps, as I alluded to earlier, were drawn by the States and certainly there is enough streets and arterial roads within that map formula to satisfy certainly the city of New York, even though perhaps, there are many streets not on that system that should be, but there are sufficient numbers on the system which makes that a livable arrangement.

Assuming that to be so, that gave the State immediately a control over what streets would be on the system. Having that control, I think the authority or the administrative authority which you have mentioned in your letter should then pass to the locality, to the streets, to the cities.

So that in fact the implementation of priorities for one should be a city responsibility. I dare say the State should not suggest that we build the West Shore Expressway before we rehabilitate First Avenue, for example, because certainly First Avenue is an essential road within the city of New York.

But the priorities just didn't come out the way the city would have liked them. The certification process has been more than ensuing by the State. It has been controlled by the State in such fashion as to make it impossible for the city to win its point, make its point with the Federal Highway Administration.

There is an intermediary here that truly is not necessary. It is a redtape problem. It is a duplicative problem and indeed it is a competitive problem and I think in the sense of direct apportionment it is an interference with the best interests of the localities.

Senator BENTSEN. Let me understand this. In the competition for funds was there pressure put on that took some of this money that would have been urban money and really caused the designation of what otherwise might be a primary road as urban roads?

Mr. LAZAR. Yes. In the sense of allocating overall the funds available. I made one point, Senator, in your absence. That was the formula which the State determined that the city was entitled to \$115 million over a 3-year period of the FAUS dollars in 1973, 1974 and 1975 and 1976. Our estimates were about \$155 million, as I recall.

Two years later the Federal Highway Administrator advises that the formula would have appropriated \$170 million to the city of New York system.

We have lost 2 years, \$55 million of built-in planning and during that period the State has used much of the funding here for programs which were not truly within the direct spirit of the FAUS program. The elimination of the railroad grade crossings, for example, many of them outer suburban, I should say semirural counties in the greater metropolitan New York area, was not the priority that I believe or this Congress, I believe, intended by the 1973 act.

That kind of situation has occurred and, of course, controlling the funding controls the apparatus, the contractors, the consultants, the design. All of that lays in wait for the State to make up its mind as to how and how fast, how and how fast they want to allocate funds.

Mr. TABOR. Mr. Chairman, in some ways Mr. Lazar is lucky because he is dealing mainly with the city and he doesn't really have to deal much with a council of governments (COG).

If we take the opposite side of the country, in southern California, one of the biggest reasons that we haven't had the Federal-aid urban system really moving and obligated funds is because we have to go through a council of governments.

It is governments representing 10 million people that have to make a joint decision about where those priorities are going to be established, which projects are going to go on, so that we have another level of bureaucracy that any of our counties are dealing with on their projects before they even get to the State.

We have got to go through this regional council of governments that is there. Then we get on to the State.

Looking at the situation in California as far as the relationships with the States, I am told that everything was held up until an agreement was worked out between the counties and the State about a split of some of the Federal-aid urban funds.

Finally, when they agreed on a 20-percent split, at that point the projects were able to start processing again. I would like to submit some more information for the record from Los Angeles and some of those other southern California counties with their experience with the Federal-aid urban system.

Senator BENTSEN. We will be pleased to have it.

My time has expired. Senator STAFFORD.

Senator STAFFORD. Thank you, Mr. Chairman. I want to express appreciation to all of you for helping this subcommittee by giving us your various points of view. Mr. Lazar, this Senator once, for a brief time, was in the Borough of Richmond during the Korean war. I notice you allude to waterborne transportation. I wonder what it now costs to ride the ferry?

Mr. LAZAR. I might advise you, Senator, that it is the same thing it cost when you rode it.

Senator STAFFORD. 5 cents?

Mr. LAZAR. 5 cents.

Senator STAFFORD. It must be a rather heavily subsidized program?

Mr. LAZAR. I must also caution that there is pending before the city council a very earnest effort to change the fare structure on the Staten Island ferry; up, no doubt.

Senator STAFFORD. Mr. Tabor, your proposal appears very similar to existing law with a more workable certification acceptance procedure involved. Is this an accurate description or are there other differences between current practices and your suggestions?

Mr. TABOR. I think, Senator, that what we are proposing is a pretty rational departure. But in effect, we are saying we think the State and local governments are now big enough that they can handle their own problems.

We think that they are already handling a major part of it and that the Federal Government is unnecessary. As we talk about all the different proposals to reduce redtape and consolidate programs, we wonder really if that is going far enough.

I think we have come to the conclusion that the best way to do this would be to return 3 cents of the 4 cents back to the States and the local governments. This was pushed within our association by counties coming from States that would lose money.

Most of the Western States are gainers under the present law and it was from States, from Western States, where those counties came in pushing for this. I was amazed by this. The staff, when they were pushing this policy, I felt I had to accept some responsibility and get down on the witness stand and advise them of what they were doing against their own interests.

They said they clearly knew what they were doing, but the cost of the redtape was enough to justify losing some of their money that they are getting now.

Senator STAFFORD. Thank you, Mr. Lazar. You have testified that multiple local jurisdictions in metropolitan areas have had little difficulty agreeing on designated recipients to distribute urban mass transportation assistance grants.

You suggest that a similar mechanism can work with urban road funds. A supplement to Mr. Tabor's testimony documents local opposition to requiring a single metropolitan planning organization to make decisions on areawide transportation in the highway program.

Would you and Mr. Tabor discuss what accounts for the opposition to the metropolitan-wide agencies in one case and apparent acceptance in the other?

Mr. LAZAR. Frankly, Senator, the metropolitan approach, the regional approach works and has obviously worked reasonably well. There are occasions where there is a larger component part such as, again, I point to New York City, where we don't have more than two votes on the Tri-State Regional Planning Council, Commission, which is far outweighed by the vote of the other counties.

We have had to learn to live with that, but that formula or format has also made it possible for us to take the UMTA money of sec. 5 and sec. 3(h) and move it rapidly because we already have built in a regional approach to planning and programs.

So, I frankly do not criticize the metropolitan regional approach, however it applies, wherever the chips fall, as long as there are certain safeguards built into the law.

Mr. TABOR. Senator, I think we have got a different situation in the New York metropolitan area, compared to a lot of other large metropolitan areas in the country. For one thing, the New York metropolitan area in effect has subdivisions within their jurisdiction.

The questions that are primarily affecting Westchester County are made by Westchester County and there are a lot of municipalities and governments to coordinate within that county. The same thing is happening in Northern New Jersey and Suffolk County.

This is not the situation we have in many places around the country. In the places that I had mentioned before such as Southern California, we have 10 million people under one council of governments. We are going a long way as far as distance goes, in what that area is covering.

But we have got 10,400,000 people in the SCAG area, Southern California Association of Governments, and just in the Los Angeles urbanized area, there are 8.5 million people. The votes are divided between the counties, but we are going from as far as out in the desert, way over to Ventura County.

There is one organization that we have to go through. If we had a system something like the New York metropolitan area where we in effect had subdivisions and the decisions could be made in those regions, we would have a different situation.

But under the regulations that have been put out by the Federal Highway Administration on metropolitan planning organizations, to which this committee has already sent in some of their objections, the State is allowed to go ahead and designate any agency.

In this case, the State of California has designated so-called A-95 clearing houses which, in our view, makes absolutely no sense. It is just causing another level of bureaucracy and is causing an awful lot of delay. This is probably the biggest reason for not getting our Federal-aid urban system under way.

Senator STAFFORD. Thank you both.

Both the State highway officials and the Association of Counties have criticized urban planning requirements about to be issued by the Department of Transportation.

Does the panel agree that it is desirable to require coordination of area-wide transportation? What specific requirements of the regulations proposed by DOT are objectionable? Do any of you care to comment on that?

Mr. TABOR. I think, Senator, the comments that we had sent in that were very detailed about the various things we objected to were quite similar to what this committee had sent in, and also what your counterpart committee in the House side had sent in and objected to.

We basically see that what the 1973 law was calling for was to have a coordinating body, but that you did not mean that this body was going to determine priorities on projects and get into all the details of the things that we think the counties and cities within that region should be doing.

However, there are repeated references throughout those regulations that we are getting back to that essential point. I think that there is a pretty good consensus between the two congressional committees and the National Association of Counties on our objections to those.

I would like to submit those again for the record. I think it should be accompanied with the correspondence that came from these two committees, too. I would be happy to.

[The material referred to follows:]

CONGRESS OF THE UNITED STATES,
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
Washington, D.C., March 28, 1975.

HON. NORBERT T. TIEMANN,
Administrator, Federal Highway Administration, U.S. Department of Transportation,
Washington, D.C.

DEAR GOVERNOR TIEMANN: There is attached herewith comments on the proposed regulations published in the Federal Register dated November 8, 1974, regarding the administration of provisions of Title 23, U.S. Code and the Urban Mass Transportation Act on planning and programming requirements for urban transportation capital improvements.

In my letter to you of January 21, 1975, I explained why it has taken so long to put these comments together and since that time the tempo of Committee activity has increased at such a pace that it has taken even longer than I anticipated at that time to put them in final form.

I appreciate sincerely the letter from Mr. Coupal, your Deputy Administrator, on February 5, 1975, recognizing the Committee's position and your own more recent comments to the Committee staff with respect to our submitting these comments at this late date.

The importance of these regulations cannot be overstated with respect to their influence on not only the highway and transit program which they are primarily directed to at this time but also to the other modes of transportation. This Committee is now engaged in aviation legislation and will be similarly concerned with the relationship of that program to these regulations.

Most importantly, we are concerned that these regulations accurately reflect the intent of the law. In this respect, it is anticipated that they will not only contain what is in the law but they will also not contain matter which is not in the law.

Sincerely,

ROBERT E. JONES, *Chairman.*

SOME SPECIFIC EXAMPLES OF PRINCIPLES NOTED IN GENERAL OBSERVATIONS

PART 473—FEDERAL-AID URBAN SYSTEM

473.102 (b)(2): There does not appear to be any reason to tie the definition of "appropriate local officials" to only those operating through the Metropolitan Planning Organization.

PART 476—INTERSTATE HIGHWAY SYSTEM—EDITORIAL AMENDMENT

There does not appear to be any reason to tie the definition of "responsible local officials" as only those acting through the Metropolitan Planning Organization.

PART 450—PLANNING ASSISTANCE AND STANDARDS

450.106(d): There should be no requirement or strong suggestion that the MPO be the A-95 agency.

450.112 (b): There is positively no requirement in law that the MPO endorse programs.

450.120(a)(7): *Implementation programming* is not a function of the 134 planning process.

450.300: The purpose as stated when taken into context with the rest of the proposed regulations dilutes unlawfully the prerogative of implementing agencies in project selection.

450.328: Nowhere in existing law is there a provision that an MPO or equivalent organization develop the transportation program.

450.324(a): Nowhere in existing law is there a provision for direct submission of project implementation from an MPO directly to a federal agency such as UMTA.

SUMMARY

The above detailed examples are not all inclusive of the difficulties arising in the proposed regulations as they relate to the General Observations. Some of these other areas would no longer be relevant if the major problems of responsibilities of the areawide planning agencies could be resolved.

COMMENTS ON RULES AND REGULATIONS ON METROPOLITAN TRANSPORTATION PLANNING FUNDS PUBLISHED IN FEDERAL REGISTER ON NOV. 8, 1974

GENERAL OBSERVATIONS

Probably the most significant general comment that could be made regarding these proposed regulations is that they go to tremendous detail to institute new concepts, many of which were neither contained in nor intended in the laws to which the regulations apply. Specifically, there were absolutely no changes in law with respect to the 3C planning process carried out under section 134 of Title 23. Certainly there were no changes in the law which granted any different degree of responsibility to agencies conducting the 3C planning process.

Further there were no changes in the programming requirements of section 105 of title 23 which in any way affect the section 134 planning requirements.

The proposed regulations do in fact grant new authorities to the 3C planning process in the areas of plan approval, program initiation, and plan implementation.

The only new element introduced into the urban planning picture in the 1973 Highway Act was the earmarking of funds to the already existing regional planning agencies. No new title as a word of art such as Metropolitan Planning Organization was intended although it appears that the proposed regulations have leaned heavily upon such a concept as a means of rewriting the intent of all previous legislation.

The more detailed comments which follow touch upon more of the items which highlight these general observations. The principles involved in these general comments, however, are considered strong enough in themselves to warrant withholding of the issuance of the regulations until such time as there is a clearer mutual understanding of what the 1973 Federal-aid Highway Act did and did not do.

One additional item of course which should not be neglected is that these regulations, when issued, should reflect the provisions of the National Mass Transportation Assistance Act of 1974 which they do not do in their present form.

U.S. SENATE, COMMITTEE ON PUBLIC WORKS,
Washington, D.C., April 23, 1975.

Hon. WILLIAM T. COLEMAN,
Secretary of Transportation, Department of Transportation,
Washington, D.C.

DEAR MR. SECRETARY: We have reviewed the draft guidelines covering planning assistance and standards for the Federal Highway Administration and the Urban Mass Transportation Administration. We support the Department's

efforts to bring together transit and highway planning and find that the regulations, to a large extent, carry out the intent of provisions in title 23, particularly those added by the Federal-Aid Highway Act of 1973.

In attempting to combine implementation of statutory requirements for the Federal Highway Administration and Urban Mass Transportation Administration programs, however, the Department has exceeded the role Congress intended it to play in mandating the structure of metropolitan planning organizations and the methods of programming highway projects.

Congress did not intend for the Federal Government to specify which type of projects should receive priority in a State or local area's highway program. Thus, subsection (a) of section 450.306 which specifies the type of projects which are to receive priority in the transportation improvement program goes beyond the role Congress intended the Federal bureaucracy to play.

Although section 134 requires that all projects in urban areas of more than 50,000 population be in accordance with the 3-C planning process, other sections of the law place special emphasis on the role of local officials in selecting the programming urban system projects and activating the Interstate transfer mechanism. Paragraphs 450.318(b)(2) and (b)(3), however, appear to give the metropolitan planning organization as much or more authority in initiating urban extension or urban Interstate projects than is given these organizations for the urban system or Interstate transfers. This is inconsistent with congressional intent to leave urban extension and Interstate programming primarily with the State.

Finally, insofar as programming is concerned, it was not our intent to require that the Urban Mass Transportation Administration approve urban system projects selected for implementation. Certainly there should be close cooperation between FHWA and UMTA in approving programs of projects to be implemented under their separate authorities, but as there has been no legislative enactment merging the two administrations or giving UMTA veto power over highway projects, we find section 450.320(a)(1) goes beyond what was intended by law.

With respect to the structure of the metropolitan planning organizations, we approve the addition made to the proposed guidelines, stating that these organizations are the forum for cooperative decisionmaking. While the degree of specificity as to the structure of these organizations exceeds that envisioned when the Congress provided that planning funds be made available directly to them, at this time we wish to emphasize only that we feel it unnecessary to urge so strongly that a transportation metropolitan planning organization also be the A-95 clearinghouse organization. Congress hoped to strengthen the transportation planning process by providing additional planning funds but did not intend to dictate in detail what form planning bodies must assume.

In connection with these excessively specific guidelines as to metropolitan planning organizations' structure, we would like to comment on the Department's definition of "appropriate" and "responsible" local officials, primarily as it applies to Part 473 of 23 CFR. Defining these officers as "elected officials of general purpose local governments" is overly restrictive. Congress did not specify which officials were to be considered "responsible" or "appropriate" so as not to require communities to reassign existing decisionmaking responsibilities.

Thus, for the purposes of urban system designation, project selection, or initiation of mass transit projects under section 103(e)(4), the requirement for action by elected officials of general purpose local governments does not comport with congressional intent.

Proper planning is essential to the effective operation of transportation systems. We hope that our comments will be helpful to you in preparing regulations that reflect the purposes of the Congress.

With best personal regards, we are

Truly,

JENNINGS RANDOLPH,
Chairman.
HOWARD H. BAKER, Jr.,
Ranking Minority Member.

Senator STAFFORD. Does anybody else on the panel care to comment?

Mr. LAZAR. Only to the extent, Senator, that the illustration I made earlier in my statement about the workability of the UMTA kind of disbursement of funds could work in a highway situation, which I pointed out in my statement.

If you have a tri-State situation that we have in New York, it is obvious that you do have a check and balance situation. In California, as pointed out by Mr. Tabor, it is really a creature wholly within the State and the control is not well divided and well balanced.

I think you could create a subregional approach in the State, any State, and thereby create a vehicle of a designated recipient as we did in the UMTA funding and this would satisfy the priorities and needs of the smallest locality within that region, within that subregion.

So as we did in New York, in Westchester County, it had its subregional decisions and it made it and so did the other suburban counties make their decision.

Mr. TABOR. This really comes back, Senator, to one basic point; that is, the boundaries and the type of work was to be determined by State and local officials together. The way the Federal regulations come out they give some leeway to the States but they are strongly encouraging that we use the existing regional agencies that have been mandated in other Federal laws. In effect, we are getting a federally mandated organization, and we are also getting the boundaries mandated.

You wouldn't have the situation in New York if the local officials had not been able to go through to their three Governors in effect, and to set up what they consider to be the boundaries of their subregions. We don't have that opportunity in many other places because the Governor is just following along with what has already been imposed in other Federal laws.

Mr. LAZAR. I would want to say one last thing, Senator. The planning and the implementation need not be coexistent. It is the planning which we have learned to live with, provided the implementation which we made under the UMTA situation fell to the local responsible official, which it did.

We acted either by local responsible official or a designated recipient, depending on what kind of transit facility or service was involved.

Senator STAFFORD. Thank you, gentlemen.

Senator BUCKLEY.

Senator BUCKLEY. Thank you, Mr. Chairman.

I am afraid I will have to be leaving very shortly. I would like to ask a couple of questions, mainly directed at Mr. Lazar.

You state in your statement that you feel that urbanized area funding of 200,000 population could readily respond to UMTA. You refer to submitting a written appendix documenting your point of view, and suggesting statutory language.

I wonder if you might just elaborate? I would appreciate your submitting that information for the benefit of the committee. At this time, please, if you would elaborate further as to your views.

Mr. LAZAR. We would conform more or less, Senator, to the section 5 provisions of the Urban Mass Transit Act of 1974. Within the urbanized areas we would create the local responsible official and the designated recipients and then programing and allocation of urban highway dollars would take place.

I am just not certain, if you don't mind asking, sir, do you wish me to go back over some of these statements I made and elaborate on them or on what I would be suggesting in draft legislation?

Senator BUCKLEY. What you would be suggesting, so that if any questions occur, we can ask them now while you are here.

Mr. LAZAR. Fine, Senator. I would certainly take the authority which we have now found workable in the Mass Transit Act and apply it to highway urban funds. I would certainly create a direct apportionment program between the Federal Government and the urbanized area.

The urbanized area for the purposes of highways certainly would have to vary somewhat from that of mass transit. But our formula could be established which would, for highway purposes, separate the urban from the rural on a more urbanized level and not strictly that which exists in the present law. Once having been able to accomplish that, I think the limitation would be rather simplistic because the formula could almost follow as to what funding would be available to the specific urbanized areas.

The heavier demands and capacities for streets within our areas of 200,000 or more, obviously, are greater than those of some smaller number. Again, that number might break at 50,000 or less to distinguish between the urbanized area for our purposes and the rural area. Perhaps the number should be something like 20,000. So that all communities of 20,000 or more would have this direct availability of the Federal highway urban assistance program. That would be in a general sense where we would go.

I think there is sufficient relationship, legal and historical, between the Federal Government, between the State and locality to safeguard the prerogatives of State management. There is an overview, a check and balance existing in the law going beyond, really, the relationship based upon the highway funding.

I think the State should not have the veto power which in effect it has today, but rather, it should have an auditing authority and an overview authority, but not one of limitation, but not one of priority or control or administrative authority.

The administration funding authority of the urban system program should lie within the urbanized area, either by singular local government or by a designated recipient chosen by a conglomeration or a consortium, so to speak, of local municipalities within that urbanized area. That is the direction I think we should be taking.

Senator BUCKLEY. I shall be looking for your input.

Mr. LAZAR. We will be happy to provide it.

Senator BUCKLEY. Elsewhere in your statement you talk about the desirability of total class within the system planning. About a year or so ago, I made the recommendation that we get away from thinking of highways and start thinking about transportation—surface transportation, highway and transportation funds—with the thought, particularly in your major metropolitan areas, focused on moving people and moving goods.

Would you feel that it would be destructive for us to be moving in that direction to the extent possible?

Mr. LAZAR. No, not at all. In fact, the whole question of energy, environment and the kind of transportation that we want to see developed within the urbanized areas related more directly to what the highway is to be used for, the capacity, the type of construction, the maintenance and resurfacing which I also talk about.

We are asking our urban highways to take greater loads every day. We are asking that because we want public transportation to have a more integral part played in the bringing of people into the cities. The highways take more of a beating.

Senator BUCKLEY. But what I was suggesting was not a diminished highway program, but rather, to give greater flexibility or total flexibility to a metropolitan area to decide how to spend the dollars, whether it is for rail, buses, or resurfacing.

Mr. LAZAR. That is in our position, of course. We actually addressed that question in our interstate transfer position. We are asking not only that it be a more realistic transfer provision, a more currently related transfer provision and a higher ratio such as a 90 to 10 which is the interstate ratio, but we would want the choice to use that for rolling stock or for highways or for mass transit facilities, wherever we determine that is the best use of those funds.

So we certainly subscribe fully to that. I didn't want to get too far into the question of mass transit this morning because I felt that would take away somewhat from the essence of the aid which has been built into the 1973 act which we are looking to in the 1975 act.

Certainly, there are mass transit components down the line and the intermodal aspects of them are critical. The park and ride, for example, which I haven't even discussed here today, an intermodal arrangement which means there has got to be an origin and a destination which is smooth, workable, and acceptable to the localities, the environment, and the economies.

I think we would do well to take some of those funds and build those kind of park-and-ride facilities and the rolling stock to take the passenger to his ultimate place, point of destination and have the urban extension system work well toward that end.

So all of that is a complementary kind of situation, where primary, urban extension, and then urban option lies either to continue with the aid to the street system or to couple it with the kind of terminal facility, the kind of pass through of persons into modal systems. All of these are the options which, frankly, should fall to the localities with a caveat that indeed we are accountable for those dollars in the manner which I have just described.

I am not for those funds coming into the localities as a general revenue measure or even necessarily a revenue-sharing kind of formula. I think it is reasonable for us to assume that these dollars are conferrable, highway dollars to public transportation needs, that they should remain as public transportation.

Senator BUCKLEY. Thank you, very much.

Would you care to comment, Mr. Tabor?

Mr. TABOR. We agree, Senator Buckley, with everything that has been said here about wanting flexibility and our position has been sound on that particular point. But I think in our own deliberations, we have come to the point that we really wonder with title 23 as it is now, whether that is possible. With all the amendments to it, we think we have come down to the viewpoint that the only way that the State could really have the leeway to work well with local governments would be to get rid of a lot of the Federal oversight that is involved. That goes back to the money.

That is why we have taken the position now that we feel that 3 cents of the 4 cents should be returned to the States. States like New York, like California, like Ohio, like Illinois, like Massachusetts, are right now involved in the mass transit and highways and other forms of transportation working with the local governments. If they didn't have these restraints, if they had to work with all the Federal agencies

and not just the Federal Highway Administration, they would be able to work out these arrangements so that we would have this local flexibility and our own local decisionmakers could have some discretion.

Right now, we are always chasing all of the other Federal laws, not just this one. For example, we were talking about what happens with the regional agency requirements. We are going to come along and use for the highway program, a federally mandated regional organization that is set up for A-95 clearance purposes. But now we are using that for the highway program. It is really taking the local elected official out of the picture in making the decision. Highway funding is now going to have to go through a regional organization which has a regional staff.

Senator BUCKLEY. Thank you, very much.

Senator STAFFORD. Mr. Chairman, I have two very brief questions that I hope can be answered briefly because of the vote. One is to Mr. Coupal. Would the administration's proposed redefinition of the construction permit Federal funds to be used for resurfacing as requested by Mr. Lazar?

Mr. COUPAL. Yes, sir.

Senator BENTSEN. That is a short answer.

Senator STAFFORD. We should have more answers like that and questions to go with it.

Mr. Ritchie, in your statement, you alluded to environmental impact statement clearances. Have you had an opportunity to see the language which has been agreed upon by Congress, between the House and the Senate, which will change to some degree the State and Federal relationship in producing environmental impact statements on highways?

Mr. RITCHIE. No, sir.

Senator STAFFORD. Your staff may have had a chance to follow it along. The conference report is being prepared, I am told, and the language has been agreed upon by the conferees. If you have any subsequent comment for the record, it would be helpful for this committee.

Mr. RITCHIE. I think, Senator, that any thought that you could give to this would be much of an improvement, especially the points that we made in our testimony about a kind of litigation, limit, concurrent reviews, and a point of contact perhaps when the environmental statement would be made.

Senator STAFFORD. Thank you.

Thank you. Mr. Chairman.

Senator BENTSEN. Thank you, Senator Stafford.

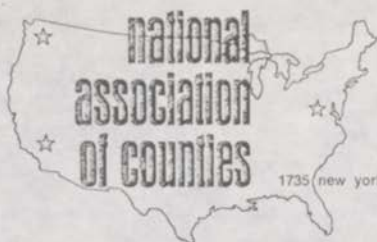
We have a statement on the redtape comments by Councilman Louis Nowell, of Los Angeles, who is here. We will insert it in the record in its entirety. (See p. 1259.)

Senator BENTSEN. Gentlemen, your statements have been very helpful to us. We appreciate them and they will contribute substantially to our decisionmaking.

Thank you.

[Whereupon, at 12:05 p.m., the subcommittee recessed, to reconvene at 2 p.m., the same day.]

[Mr. Tabor's complete statement, the statement and resolution from Councilman Louis Nowell, and comments on the testimony of Mr. Lazar from Raymond T. Schuler, Commissioner, New York State Department of Transportation, follow:]



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TESTIMONY OF RALPH L. TABOR, DIRECTOR OF FEDERAL AFFAIRS
REPRESENTING THE NATIONAL ASSOCIATION OF COUNTIES BEFORE THE
SUBCOMMITTEE ON TRANSPORTATION, UNITED STATES SENATE, JULY 24, 1975

The Federal Role in the Highway Program

Mr. Chairman,

My name is Ralph L. Tabor. I am Director of Federal Affairs for the National Association of Counties. Accompanying me is Sandra Spence, NACo Legislative Representative. We will be prepared to answer any questions you may have at the conclusion of our statement.

NACo is the only organization representing county government at the national level. We deeply appreciate the opportunity to present our views during these most important hearings, for transportation policy is one of the most significant concerns of county governments. We represent the level of government most directly involved in almost every form of this basic governmental function.

Although many counties are directly or indirectly involved in every mode of transportation, highways alone constitute one of the four largest categories of county expenditures. In 1972-73, for example, our nation's counties disbursed \$2.766 billion, including intergovernmental transfers, for highway purposes. Of direct county revenues excluding intergovernmental transfers, 10.9 percent was expended for highways. (Attachment A shows relative share of county disbursements for highways, education, public welfare, and health and hospitals over the past decade.)

NACo POSITION ON FEDERAL HIGHWAY PROGRAM

Although our interests and concerns regarding highways and transportation in general are broad, we shall, as requested, limit our statement today primarily to the future federal role in the highway program. In that regard, our official policy is quite simple.

We believe that one cent of the current four-cent federal gasoline tax should be retained in the Highway Trust Fund for completion of the Interstate system. We believe that the remaining three cents should be returned to states in proportion to collections (or highway use) in each state, to be used for transportation purposes determined by each state along with its constituent local governments.

Now, let me clarify that simple sentence, and let me explain how we came to that position. In our statement of basic philosophy on transportation, NACo recognizes that our nation's transportation

network is a basic force molding urban and rural development. We believe a balanced and coordinated transportation system is so fundamental to all aspects of American life that every level of government must share responsibility and that, through shared responsibility, we must find a way to assure the maintenance, integration, and continuing development of all modes.

We are acutely aware of the problems currently facing all modes of transportation. Not only are our highways and bridges wearing out at a faster rate than we are currently repairing them---our nation's rail system is in crisis. Bridging the gap between technology and practice in air transportation is a mounting problem. And I need not dwell on the woeful lack of resources being devoted to improvement in our systems of public transportation, in both urban and rural areas alike. In short, it is incumbent upon us to find a future course for our national highway program that is sufficiently flexible to allow for innovation and progress in integrating our modes of transportation as a means to provide that balanced and coordinated system I am certain is our common goal.

BUT WHY RETURN THE NON-INTERSTATE HIGHWAYS TO STATE AND LOCAL PROGRAM CONTROL?

Basically, NACo membership had three reasons for urging the return of the non-Interstate programs to state and local management: first, because the completion of most new highway construction changes the nature of the role we believe each level of government should now play; second, as a means to reduce red tape and its associated costs; and

third, as a means to increase the flexibility of state and local elected decision-makers in the establishment of transportation priorities.

Mr. Chairman, the day of major new initiatives in highway construction on rights-of-way is over---we are now struggling with the problems of maintaining and improving that basic existing national network of highways and streets which has been built since the first significant federal financial assistance was provided in the 1916 Federal Aid Road Act.

With 85 percent of our national system of Interstate and Defense Highways now open to traffic, and the existence of a basic network of urban and rural roads, the remaining 15 percent of unfinished Interstate highways today constitutes the only incomplete highway system of significant nationwide interest.

We believe there should be a concurrent reduction in federal program involvement with the reduction in emphasis on construction of new highways needed as part of our nationwide system.

NACo realizes the issue of red tape will be addressed by this Subcommittee next week and we do not wish to belabor the point. However, we have noted that your list of witnesses does not include representatives from state or local public agencies which suffer under the paper weight imposed by the tons of federal regulations which characterize today's Federal-state-local highway "partnership."

Let me call to your attention a special report, "Red Tape III" prepared cooperatively by the County Supervisors Association of California, the League of California Cities, and the California

Associated General Contractors, Engineering and Grading Contractors, and Federation of Labor. I would like to submit this report for the record (Attachment B) as documentation of the utter frustration these groups have experienced since their first joint effort to deal with the red tape problem in October, 1973.

One fact alone from this report gives dramatic evidence of the overwhelming burden and usurpation of state and local decision-making capability imposed by complex, detailed, and never-ending federal regulations---in the first six months of 1975, the Federal Government published 22,000 pages of fine print in the Federal Register, regulating in detail the lives of our citizens and the operations of our society.

In hearings before this very Subcommittee earlier this year, we recall to your attention testimony indicating the \$50 million in direct costs to the state of California for preparing Environmental Impact Statements for highway projects and the \$4 million extra spent in Maryland to relocate a bridge which would have temporarily inconvenienced two eagles.

Now, NACo strongly supports measures aimed at protecting and preserving our environment. Our organization has taken a number of steps, both favoring appropriate environmental protection measures in federal legislation and providing technical services to assist counties across this nation in undertaking environmental protection programs. We must point out, however, that unless some judgment is exercised in the adoption and enforcement of federal regulations in this area, we fear a terrible backlash against the entire process,

particularly in a time of energy crisis and economic uncertainty.

In fact, the opinions of our members in regard to the red tape issue is so strong that even many of those counties in states which currently gain from the redistribution effect of existing apportionment formulae have expressed their belief that fewer strings from reduced federal involvement would reduce costs and thereby justify the reduction in funds which would result from sharing gas tax revenues in proportion to collections.

As support for our position that reduced red tape will reduce costs and thereby justify even that redistribution effect which would result for return of three cents to states of origin, let me cite a study commissioned by the Federal Aviation Administration.

This report, "Analysis of General Aviation Airports Developed with and without Federal Aid," found that generally those built with Federal financial assistance took longer to build and cost more. Although some of the delays and additional costs resulted from environmental laws and requirements regarding prevailing wage rates, there were several factors directly under DOT control which resulted in increased costs, such as national standards for lighting systems and runway pavement which were higher than needed in certain areas and in very small airports. Application procedures were another significant cost factor.

We cite this study only to suggest that a similar study of Federal Highway Administration requirements would probably lead to similar evidence of the increased cost to state and local units

of meeting unnecessarily strict federal requirements which may be justified at the national level, but which could be reduced in certain local situations. The federal agencies must regulate in a manner designed to deal with the exceptional case. This only leads to unnecessary delays for local governments.

In addition to reducing red tape and its associated costs, we believe that return of the non-Interstate programs to state and local governments would significantly increase the degree of public responsiveness to variations in transportation needs and problems within this diverse nation. This type of flexibility and responsiveness will be particularly critical as we face the "future shock" which will accompany the rapidly changing and almost unpredictable needs and problems of the next quarter century.

While highways remain the primary mode of transportation in most areas, our membership has given solid recognition to evidence that our nation's energy situation is shifting transportation spending priorities in some states and local units from highway construction to public transportation systems. Yet, legal authority contained in the 1973 Federal Aid Highway Act for a shifting of Trust Fund monies from highways to public transportation projects has become so bogged down by federal red tape that, to date, the amount of money actually transferred is minimal.

We believe that maximum flexibility in state and local decision-making is needed in both national policy and federal practice.

THE TRUST FUND

At this point, let me deal with the questions our proposal raises in regard to the future of the Highway Trust Fund.

NACo membership voted as early as 1973 to support a concept which would allow Highway Trust Fund resources to be spent for a total transportation program, with local determination by locally elected officials for the use of such monies for other modes of transportation. This position was taken in recognition of the significant impact of the automobile and highways on public health, land usage, air quality, community environment, and more recently, on energy consumption.

In calling for the return of a major share of Trust Fund revenues to state and local government, we are not suggesting outright abolition of the Trust Fund for other than Interstate purposes. In fact, as we consider the options, we would suggest that use of the Trust Fund as a mechanism for future funding is most appropriate. We can see great merit in use of the Trust Funds as a depository for transportation user tax revenues, so long as significant funding is then returned to state and local governments for use on a local priority basis.

In spite of the criticisms of Trust Fund financing by certain management theories and administrators who wish to retain constant control over revenues and expenditures, we believe such thinking is unrealistic in regard to the particular and unique demands of highway construction and other types of transportation finance which require long-term commitment and assured continuity of funding. Annual appropriations from general revenues simply will not give state and

local officials sufficient expectation of future funding levels to allow the kind of engineering and fiscal planning so urgently needed to maintain and re-construct our nation's highways.

THE REDISTRIBUTION EFFECT AND THE CONSTITUTIONAL DEDICATION OF FUNDS

There are other issues which our proposal has raised: the immediate impact of returning revenues to states in proportion to collections and the fact that some state constitutions require dedication of gasoline tax revenues to highways only and not to other transportation needs.

In regard to the redistribution effect, I would like to point to evidence (Attachment C) that the return of gasoline tax revenues to states in proportion to collections would be less significant than it might earlier have been.

We were surprised to note that in a comparison of estimated state payments into the Trust Fund with federal aid apportionments from the Fund in fiscal year 1974, the number of states which would suffer reduced apportionments as a result of our proposal was only twenty-two, and only 17 would lose more than five or six percent. If revenues had been shared in an amount proportionate to collections since the inception of the Trust Fund in 1956, thirty states would have lost money. The point is that apportionments now are redistributing Trust Fund revenues to a much less significant degree than they have heretofore, while ever-increasing red tape is costing our state and local governments untold millions of dollars. As a result, we believe our policy is justified in spite of the immediate impact on certain states.

The other issue is that there are currently 26 states (see Attachment D) with constitutional provisions requiring that revenues generated via gasoline taxes be dedicated solely for highway construction and maintenance, not for other transportation purposes.

We agree that the approach taken in the Administration bill, which would repeal one cent in states which increase the state gasoline tax, might interfere with immediate flexibility in those states. As stated earlier, NACo favors flexibility for state and local decisions to use Trust Fund revenues for either highways or public transportation. We believe, however, that our approach of continuing the federal role in the collection of the current level of gasoline tax and simply returning it to states in proportion to collections, would render state constitutional provisions inapplicable, for we believe that those state provisions apply only to gasoline taxes collected by the states, not those collected by the federal government.

THE FEDERAL ROLE UNDER NACo PROPOSAL

The question arises, if three cents is returned to state and local government, what legitimate role is left to the Federal Government in the further development and maintenance of our national transportation system?

As already stated, we believe the Federal Government should continue its efficient service as tax collector for revenues to be returned to state and local government.

We believe the Federal Government should continue its leadership in the joint preparation, with state and local assistance, of the

national functional classification study to establish a primary system comprising major highways (including the Interstate) in both rural and urban areas, a secondary system comprising collector roads in rural areas, and an urban system comprising collector streets in urban areas. It would be these systems which would be part of our overall national highway system on which revenues from the three cent gasoline tax could be spent. These systems would also provide a basis for establishment of broad national goals for assurance of an equitable split by states of funding between urban and rural areas.

We believe that Congress should establish broad national policy under which the Federal Government should develop broad-brush procedural guidelines and general post-audit compliance procedures. Under such a system, state and local governments could comply with national policy and federal requirements without the current project-by-project review and second guessing of state and local priorities by federal bureaucrats.

We believe the Federal Government should develop a meaningful procedure for certification and acceptance of state, city and/or county standards and requirements for purposes of meeting all facets of federal requirements, including environmental reviews, prevailing wage requirements and equal employment opportunity requirements, where such state and local laws and procedures are equal to or greater than federal requirements.^{1/}

Other areas of appropriate concern to the Federal Government would include such activities as: coordination of highways with other modes of transportation to achieve the most efficient balance of transportation

^{1/} In this regard, NACo has urged that local government should work with the new nationwide "Commission on Federal Paperwork" established pursuant to HR 16424 in pursuit of more streamlined administrative procedures for operation of all federal programs.

systems and facilities; special efforts to achieve national social and economic development goals through basic transportation systems, such as the Appalachian development corridor system and the national demonstration economic growth center development corridors; scientific advancement through direct research and development and the creation of a systematic process for implementing the results of R and D efforts undertaken by state and local governments, universities, and private organizations; and planning and coordination to assure appropriate interface of highways at state lines and resolution of similar inter-state issues.

STATE-LOCAL RELATIONSHIP TO PROPOSED FEDERAL ROLE

We believe that our proposal will not significantly change the current nature of state and local responsibilities in relation to the proposed federal role. Under the existing federal aid program, states or local governments initiate improvements to be made. States or local governments make the surveys and plans. States or local governments let the contracts. States or local governments supervise the construction. Highways constructed with Federal funds remain under the administrative control of states or local governments. States or local governments are responsible---and pay for---highway operation and maintenance.

What our proposal will do is to reduce red tape and bureaucratic interference in what should appropriately be state and local decisions and priorities. By returning operational responsibility to the levels of government most familiar with operational problems, needs and

solutions, our proposal will free the federal agency from responsibilities it is not most capable of performing and will allow federal personnel to concentrate their intellectual powers on matters of truly national concern.

INTRASTATE RESPONSIBILITIES IN THE FUTURE HIGHWAY PROGRAM

The state-local split in both degree of responsibility and functional nature of that responsibility for highways and other forms of transportation varies considerably from state to state. In maintenance, local government disbursements nationally exceed state disbursements, while state disbursements are greater for such functions as right-of-way acquisition and construction. (Attachment E).

The relative role of states and local unites varies considerably, however, among the various states. Construction and maintenance of roads, highways, and expressways in Alaska, Delaware, North Carolina, Rhode Island, Virginia, and West Virginia are almost entirely a state function. In connecticut, Pennsylvania, Vermont, Massachusetts, New Hampshire, and Maine, towns or townships share road responsibilities with the state. In states usch as Illinois, Minnesota, and Ohio, both counties and townships construct and maintain roads; townships tend to be responsible for farm-to-market roads while the counties are responsible for the more heavily travelled roads. In most states, counties share significant highway responsibility with state agencies. (See Attachment F.)

There are similar variations from region to region and between urban and rural in the relative roles of state and local governments in other modes of transportation such as airports and mass transportation.

We believe that the particular mix of state-local involvement in such matters is not an appropriate concern of the Federal Government. These relationships have developed out of the particular needs and traditions of our nation's diverse state and local units of government over the two hundred and more years of our history. Changes are occurring in response to the changing needs of our citizens, and such changes promise to occur even more rapidly during the next quarter century.

NACO is proud of continuing research and training efforts conducted cooperatively with the Federal Highway Administration, the National Association of County Engineers, and State Associations of Counties to develop a series of thirteen training manuals and a workshop format to upgrade the skills of those professionals across this nation who are involved in the construction and maintenance of our county roads.

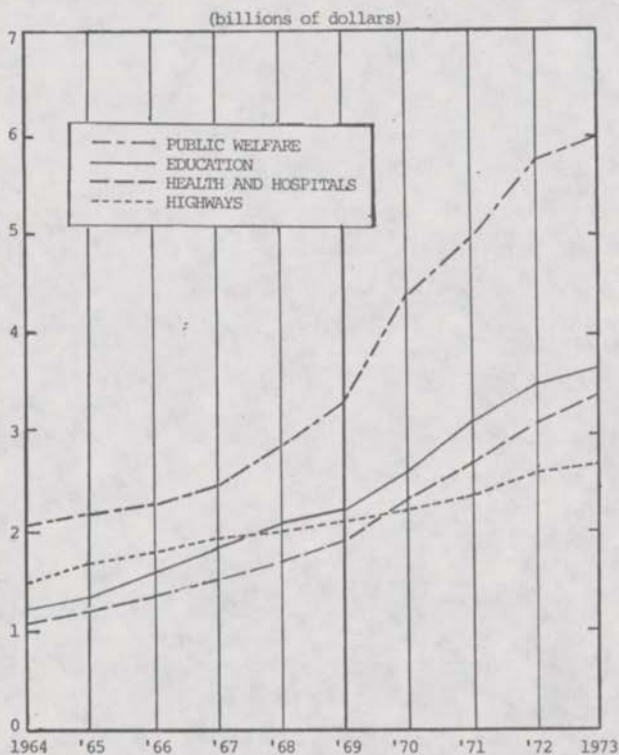
We believe that the assignment of meaningful responsibility to state and local officials, backed by competent professional staffs, will result in a more efficient and effective administrative and decision-making system.

With such a shift from the current degree of federal involvement in operational kinds of decisions will come, we believe, some increased tensions in relationships between state and local officials and transportation administrators. We believe such tensions can be a healthy sign and, without unnecessary federal interference, can lead to creative results and increased responsiveness to the public will.

CONCLUSION

In conclusion, Mr. Chairman and distinguished members of the Subcommittee, let me thank you for this opportunity to share with you the views of the National Association of Counties on the future federal role in the highway program. We urge that you give careful consideration to our recommendations, for we strongly believe that the significant replacement of state and local priorities for the current artificiality of priorities imposed by bureaucratic requirements and the existence of so many categorical approaches will rend our entire system much more responsive to the real transportation needs of the American public while attaining greater relevance to the problems and needs of our citizens over the next quarter century.

ATTACHMENT A

TRENDS IN COUNTY DIRECT GENERAL
EXPENDITURE FOR SELECTED MAJOR FUNCTIONS:
1963-64 to 1972-73

Source: U.S. Dept. of Commerce, Bureau of the Census, County Government Finances in 1972-73, Washington, D. C., 1975, p.2.

Attachment C to NACo Testimony

COMPARISON OF ESTIMATED STATE PAYMENTS INTO THE HIGHWAY TRUST FUND,
AND FEDERAL-AID APPORTIONMENTS FROM THE FUND
FISCAL YEARS 1957-1974TABLE FE-221
OCTOBER 1974

(In thousands of dollars)

STATE	PAYMENTS INTO THE FUND 1/		APPORTIONMENTS FROM THE FUND 2/		RATIO - APPORTIONMENTS/PAYMENTS	
	FISCAL YEAR 1974	CUMULATED SINCE 7-1-56	FISCAL YEAR 1974	CUMULATED SINCE 7-1-56	FISCAL YEAR 1974	CUMULATED SINCE 7-1-56
	(1)	(2)	(3)	(4)	(5)	(6)
Alabama	115,961	1,253,322	92,145	1,404,123	0.79	1.12
Alaska	7,408	76,466	63,979	676,082	8.64	8.84
Arizona	76,716	715,804	79,337	1,027,861	1.03	1.44
Arkansas	77,979	816,119	46,199	705,579	0.59	0.86
California	618,134	7,096,092	363,328	5,739,261	0.59	0.81
Colorado	84,293	864,284	86,756	992,737	1.03	1.15
Connecticut	75,000	907,504	99,564	1,118,338	1.31	1.23
Delaware	18,427	208,004	23,312	271,352	1.27	1.30
Dist. of Col.	13,527	196,441	67,096	836,037	4.96	4.26
Florida	296,947	2,376,154	143,556	1,552,140	0.56	0.65
Georgia	177,667	1,793,539	114,130	1,449,338	0.64	0.81
Hawaii	15,891	170,692	37,224	509,169	2.34	2.99
Idaho	29,668	331,598	34,273	507,816	1.16	1.53
Illinois	291,440	3,426,107	229,490	3,669,897	0.79	1.08
Indiana	170,191	2,021,843	88,936	1,560,860	0.47	0.77
Iowa	105,136	1,147,014	66,021	1,037,112	0.64	0.70
Kansas	81,224	974,018	67,070	876,952	0.83	0.90
Kentucky	103,196	1,122,026	72,319	1,252,261	0.70	1.12
Louisiana	107,571	1,188,227	113,529	1,646,033	1.06	1.39
Maine	32,462	377,999	28,247	413,366	0.87	1.09
Maryland	106,530	1,159,889	130,917	1,329,013	1.23	1.15
Massachusetts	132,869	1,575,641	126,318	1,662,771	0.95	1.06
Michigan	270,914	3,081,689	175,072	2,574,027	0.65	0.84
Minnesota	122,800	1,382,193	109,524	1,662,062	0.90	1.16
Mississippi	76,377	833,321	51,419	857,810	0.67	1.03
Missouri	158,899	1,857,095	104,671	1,737,226	0.66	0.94
Montana	31,295	350,525	54,479	912,516	1.74	2.60
Nebraska	58,436	656,120	40,419	622,277	0.69	0.95
Nevada	24,184	242,589	30,794	484,703	1.27	2.00
New Hampshire	23,784	256,831	23,500	350,356	0.99	1.36
New Jersey	106,771	2,201,186	132,371	1,790,738	0.71	0.81
New Mexico	45,117	502,830	47,073	797,688	1.04	1.59
New York	335,258	4,156,345	257,853	4,014,458	0.77	0.97
North Carolina	174,432	1,862,840	98,520	1,107,174	0.56	0.59
North Dakota	29,665	256,554	32,641	488,022	1.44	1.90
Ohio	306,585	3,567,774	174,419	3,468,382	0.57	0.97
Oklahoma	100,120	1,146,949	54,273	886,831	0.54	0.77
Oregon	81,895	886,913	97,492	1,249,853	1.19	1.41
Pennsylvania	301,352	3,517,958	230,231	3,334,692	0.76	0.95
Rhode Island	21,143	264,792	34,562	412,769	1.63	1.56
South Carolina	88,660	906,104	48,404	696,828	0.55	0.75
South Dakota	25,285	300,871	34,267	570,764	1.36	1.90
Tennessee	139,533	1,431,513	78,942	1,514,561	0.57	1.06
Texas	453,866	4,797,373	247,346	3,603,080	0.54	0.75
Utah	40,197	420,629	48,566	857,436	1.21	2.04
Vermont	14,899	165,313	20,569	427,192	1.38	2.58
Virginia	149,443	1,598,379	157,435	1,914,771	1.05	1.20
Washington	104,000	1,186,614	130,169	1,554,154	1.25	1.31
West Virginia	50,887	583,267	77,764	1,300,402	1.53	2.23
Wisconsin	125,875	1,423,795	79,806	993,327	0.63	0.70
Wyoming	19,594	217,377	32,820	619,958	1.68	2.85
Puerto Rico	-	-	19,460	144,974	-	-
Total	6,260,310	69,837,853	4,893,749	71,147,399	0.78	1.02

1/ Fiscal year 1974 payments into the fund are based on preliminary receipts as reported by the U.S. Department of the Treasury. Includes revenues from excises only.

2/ Includes capital outlay, and other funds including Highway Safety Funds.

Source: Federal Highway Administration, U.S. DOT, Highway Statistics-1974

Attachment D To HACO Testimony

STATES REQUIRING GASOLINE TAX REVENUE
TO BE USED ONLY FOR HIGHWAY PURPOSES

An examination of State Constitutions reveals the following States requiring revenues generated via gasoline taxes to be used solely for highway construction and maintenance.

- (1) Alabama (Ala. Con., XCIII, XX-A, and XXI);
- (2) California (Calif. Con., Article XXVI, Sections 2 and 4);
- (3) Florida (Fla. Con., Article IX, Section 16);
- (4) Georgia (Ga. Con., Article VII, Section IX, paragraph 4);
- (5) Idaho (Ida. Con., Article VII, Section 17);
- (6) Iowa (Iwa. Con., Article VII, Section 8);
- (7) Kansas (Kan. Con., Article XI, Section 10);
- (8) Kentucky (Ken. Con., Section 230);
- (9) Louisiana (La. Con., Article VI, Section 19);
- (10) Maine (Me. Con., Article IX, Section 19);
- (11) Massachusetts (Mass. Con., Amendment LXXVIII);
- (12) Michigan (Mich. Con., Article IX, Section 9);
- (13) Minnesota (Minn. Con., Article IX, Section 5, Article XVI, Section 10);
- (14) Missouri (Mo. Con., Article IV, Sections 30 (a) and (b));
- (15) Montana (Mont. Con., Article XII, Section 1b);
- (16) Nebraska (Neb. Con., Article VII, Section 5);
- (17) Nevada (Nev. Con., Article IX, Section 4);
- (18) New Hampshire (N.H. Con., Article II, Section 6a);
- (19) New Mexico (N.M. Con., Article IX, Section 16);
- (20) North Dakota (N.D. Con., Amendment 73);
- (21) Ohio (Ohio Con., Article XII, Section 5a);
- (22) South Carolina (S.C. Con., Article X, Section 22);
- (23) South Dakota (S.D. Con., Article XI, Section 8);
- (24) Texas (Tex. Con., Article VIII, Section 7a);
- (25) Utah (Ut. Con., Article XIII, Section 13, paragraph 4);
- (26) Wisconsin (Wisc. Con., Article VIII, Section 10).

Source: Council of State Governments Energy Project
Bulletin No. 75-21, June 16, 1975

Attachment E

DISBURSEMENTS FOR HIGHWAY PURPOSES
BY STATE AND LOCAL GOVERNMENTS

	<u>1973</u> (In thousands of dollars)	<u>1973^{3/}</u> (In thousands of dollars)	
	<u>State^{1/}</u>	<u>Local^{4/}</u>	<u>State/Local Percentages</u>
Right-of-way	1,066,626	123,003	89.7/10.3
Construction	7,292,933	1,797,892	80.2/19.8
Maintenance	2,510,688	3,103,805	44.7/55.3
Other	<u>4,918,098^{2/}</u>	<u>2,314,514^{5/}</u>	<u>68.0/32.0</u>
Total	15,788,345	7,339,214	68.3/31.7

^{1/} Data shown are for direct state expenditures for state-administered highways and local roads and streets. Excludes grants-in-aid to local governments.

^{2/} Includes engineering, installation of traffic service facilities, administration and miscellaneous, highway law enforcement and safety, bond interest and bond retirement, and debt service for local roads.

^{3/} 1973 figures not available for local governments.

^{4/} Data shown are for direct county, township, and municipal expenditures for roads and streets. Excludes payments to other governments.

^{5/} Includes engineering, administration and miscellaneous, interest and debt retirement.

Source: U.S. Dept. of Transportation, Federal Highway Administration, Highway Statistics, Washington, D.C., 1973, pp. 102, 126-27, 132, 162-63, 166-67.

COUNTIES WITH ROAD AND BRIDGE RESPONSIBILITIES

STATE	INDEPENDENTLY ORGANIZED COUNTY GOVERNMENTS	MAINTENANCE RESPONSIBILITY FOR COUNTY ROADS AND BRIDGES	COMMENTS
Alabama	67	57	State Maintained - 10 Counties
Alaska	9	0	State Maintained
Arizona	14	14	
Arkansas	75	75	
California	57 ^{1/}	57	
Colorado	62 ^{1/}	62	
Connecticut	0	0	State-Town Maintained
Delaware	3	0	State Maintained
Florida	66	66	
Georgia	159	159	
Hawaii	3 ^{1/2/}	3	
Idaho	44	44	
Illinois	102	102	
Indiana	92	92	
Iowa	99	99	
Kansas	105	105	
Kentucky	120	120	
Louisiana	62 ^{3/}	62	
Maine	16	0	State-Town Maintained
Maryland	23	17	State Maintained - 6 Counties
Mass.	12	0	State-Town Maintained
Michigan	83	83	
Minnesota	87	87	
Mississippi	82	82	

Missouri	114	114	
Montana	56	56	
Nebraska	93	93	
Nevada	17	17	
New Hampshire	10	0	State-Town Maintained
New Jersey	21	21	
New Mexico	32	32	
New York	57 ^{3/}	57	
North Carolina	100	0	State Maintained
North Dakota	53	53	
Ohio	88	88	
Oklahoma	77	77	
Oregon	36	36	
Pennsylvania	66 ^{3/}	1	State-Town Maintained
Rhode Island	0	0	State Maintained
South Carolina	46	46	
South Dakota	64 ^{5/}	64 ^{5/}	
Tennessee	94	94 ^{4/}	
Texas	254	254	
Utah	29	29	
Vermont	14	0	State-Town Maintained
Virginia	96	2	State Maintained - 96 Counties
Washington	39	39	
West Virginia	55	0	State Maintained
Wisconsin	72	72	
Wyoming	23	23	

3048

2654

Additional County-type Areas
(Not Included in Table)

- 1/ Areas with governments legally designated as city-counties and operating as cities.
 California; City and County of San Francisco
 Colorado; City and County of Denver
 Hawaii; City and County of Honolulu
- 2/ Areas having certain type counties but operating under state government.
 Hawaii; County of Kalawao
- 3/ Areas having certain types of county offices but operating as part of a city.
 Louisiana; Parish of Orleans (New Orleans)
 Parish of East Baton Rouge (Baton Rouge)
 New York: Counties of Bronx, Kings, New York, Queens,
 and Richmond (New York City)
 Pennsylvania; County of Philadelphia (Philadelphia)
- 4/ Area designated as metropolitan government operating as a city.
 Tennessee; Davidson County and Nashville
- 5/ Unorganized areas bearing county designations attached to other counties for government purposes.
 South Dakota; Shannon, Tod, and Washabaugh

Source: NACo Survey. Data is from 1970. Please note that state-local relationships in highway maintenance frequently change.

**"RED TAPE" COMMENTS TO CALIFORNIA CONGRESSIONAL DELEGATION
BY COUNCILMAN LOUIS NOWELL, LOS ANGELES**

In the next few minutes I have been asked to express my views to you about our experience in Los Angeles with the 1973 Federal-Aid Highway Act, and in particular, the present implementation of the Federal-Aid Urban Program.

We have asked the California Congressional Delegation to meet with this unique alliance of organizations who have flown here from California. Never have we seen labor, management, City and County officials on the same team. They have been unified by a shared concern for the nation's economy, growing unemployment, proliferating red tape, and the common desire to bring Federal funds rapidly into project construction.

Russell Train, Environmental Protection Agency Administrator, recently said "the Agency must do a far better job of working with the citizens of this country, primarily through their elected officials at the state and local levels, not simply after the fact, but in the very formulation of our regulations, guidelines, and plans."

I am a "local elected official" who agrees totally with this statement, but who sadly reports that our warnings and input have been ignored. Although I am here as one directly responsible to my constituency, which is almost 200,000 citizens, the Federal rules would like to see my comments to you translated through a Metropolitan Planning Organization.

The City Engineer has received the wrath of my frustration for the rather noticeable reduction in street improvement construction in Los Angeles during the past three to four years. I have slowly come to learn, however, that the situation isn't as simple as fixing responsibility on individuals. Besides the layers of government separating the local community from Federal funds, we find changing regulations and escalating requirements. It seems in our City that we are totally losing control over the projects that we want to build, their timetable for construction, and perhaps our entire budget. We are choosing projects not from need, but for processing ease through red tape. I am perplexed by this, my constituency is concerned, and as Chairman of our Public Works Committee of the City Council, the local construction industry has let me know that they don't like it.

The 1973 Act, now two years old, came forth with badly needed dollars to help solve urban transportation problems in the cities and counties of America where we have a tightening austerity. In local government we are extremely thankful to Congress for their intent. However, these dollars are not achieving the goals that were envisioned, even though many people are trying desperately to make it all happen. It will now take our best legislative efforts to correct this situation before we are hopelessly lost in a bureaucratic maze.

There are thousands of specific incidents which I have learned pertain to inflationary erosion, usurpment of authority, jurisdictional conflicts, unnecessary controls, insensitivity of non-resident bureaucrats, super check and review, and a myriad of ever new and alien complications. Some are contained within "Red Tape III" (reference to booklet) and may be presented by others here today, or in subsequent workshops or testimony.

For example, Congress has charged the Secretary of Transportation with the responsibility for a successful Federal-Aid Urban Program. From this beginning, the dollars must pass through the Federal Bureaucracy (FHWA, UMTA, HUD, EPA, etc), the State Government Bureaucracy, to the Metropolitan Planning Organizations and other local decision-making groups. Before it can be expended, it is further subjected to the local government controls and the City Hall bureaucratic process. From project conception and planning to completion and auditing, a project must pass through at least three major bureaucratic levels of government (Federal, State, and Local), plus the new intermediate decision makers at a regional level with a developing bureaucracy and also miscellaneous citizen advisory groups. Regardless of what the Congressional law states, each has its own objectives and interpretations. Each has its own budget system. Each has its policy and procedures. Each has its own technical standards for design, contract documents, and environmental impact procedures. Each has its own ideas on right of way acquisition, relocation assistance, and community involvement. Each has its own administrative and processing requirements and formats. Each must be consulted with, and each must have time for review and approvals.

Let's think about this a moment in terms of the nature of the system being employed to deliver the product. The very machinery which has come about to make the program work is producing failure to the program. It is filled with an incredible degree of inefficiency. The very inertia of it surpasses understanding.

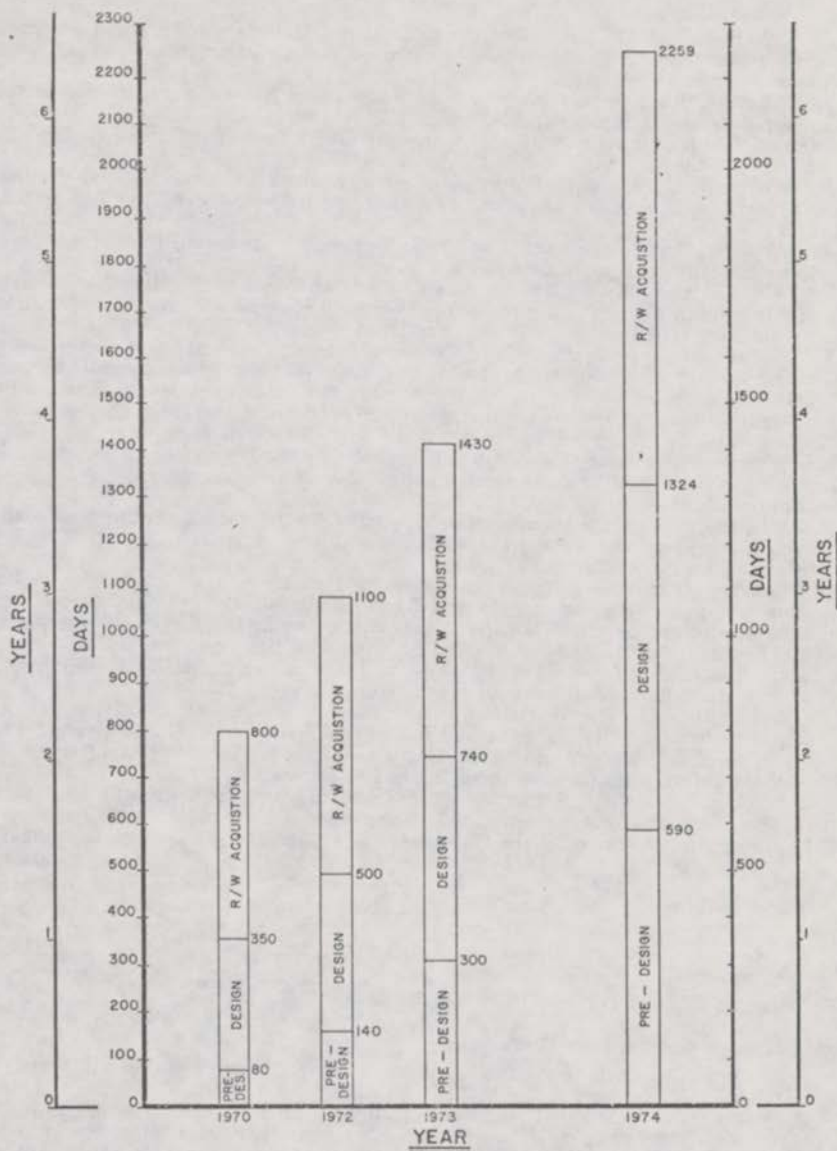
It is more geared to proliferate massive paper congestion than the construction of projects. In all my years in government, I have never witnessed such unwieldy red tape and conflict of process, method and purpose. The program objectives were conceived with good intent, but unfortunately the delivery system by its very nature is laden with individuals trying to do their "thing". This snowballing cost of administration doesn't build anything but jobs for bureaucrats. It just simply is not possible for that original Federal dollar to come out at the local end of such a pipeline—only a trickle of cents—and that is what I am here to appeal to you about. Surely we all want to make more sense (*SENSE* not *CENTS*) out of all this, and dollars into construction.

In just four years, Los Angeles has found the time required to complete the appraisals for right of way acquisition for a typical street improvement project in the FAU program has almost tripled. The elapsed time from project authorization to start of construction has gone from approximately 800 days to 2259 days for the average project. This is *6Z years* and the situation must be corrected. The inflation loss caused by the delay is literally destroying sound capital programming. There must be a better way and I believe it lies in the genuine elimination of red tape including the minimization of bureaucratic involvement.

Also, I believe that Federal guidelines developed for planning, equal employment opportunity, environmental control, wages, and engineering design have merit. However, the Federal government should certify and accept any state or city standards in such matters which are at least equal to broad Federal guidelines. A *genuine* Certification Acceptance program could eliminate the bulk of the problem that we have been discussing. But changes from any real reform would appear possible only if the Congress directs corrective action which is not subject to bureaucratic redefinition.

In conclusion, there is absolutely no sound reason for dollars spent on local facilities to be subjected to a massive super-checking procedure. Federal funds intended for local use should be expedited in the form of block grants or revenue sharing. This is what our state does with gas tax, subject only to *broad guidelines and post-audit compliance*.

Thank you for the opportunity of this meeting. I urge you to consider immediate action. The funds must come more quickly and directly to the user and the responsibility for the proper use must be with the user. Our nation needs to get the construction industry going. We need jobs now for people who want to go to work.



ELAPSED TIME FROM PROJECT AUTHORIZATION TO START OF CONSTRUCTION

RESOLUTION

Whereas, with the passage of the Federal Aid Highway Act of 1973 additional funds were made available for transportation and street projects in urban areas; and

Whereas, urban areas with population in excess of 200,000 were afforded certain assurances under the Federal Aid Highway Act of 1973 that they would receive fair and equitable treatment in the apportionment and use of these Federal Aid Urban Systems (FAUS) funds for both highway or mass transit purposes; and

Whereas, the cooperative process that was required under the Federal Highway Act for FAUS programs has been developed and approved by all required parties; and

Whereas, despite this fact, a red tape logjam has prevented the actual flow of these funds to local governments; and

Whereas, the City of Los Angeles now has applications pending for in excess of \$11 million in such badly needed FAUS projects that are now stymied within the massive bureaucratic red tape snarl; and

Whereas, it appears that the only way to break this logjam of red tape and thereby allow these funds to flow to the involved local governmental agencies, and provide more jobs, is to seek a change in the federal legislation that has had a dominating effect on the administrative and procedural provisions that have been imposed on this program; and

Whereas, if it were possible to change the method whereby these funds are made available to urbanized areas much of this administrative, red tape could be eliminated; and

Whereas, this could be accomplished without eliminating the assurance that such funds are being spent in accordance with the purpose for which they were intended, and in the manner required; now therefore be it

Resolved, That the City of Los Angeles include in its Federal Legislative Program sponsorship or support of federal legislation which would simplify the administration and release of funds that are available for FAUS projects under the Federal Aid Highway Act of 1973, including but not limited to a change in the appropriate federal laws to allow funds for this program to be appropriated directly to urbanized areas with a population exceeding 200,000; or to establish a post audit system for reviewing of the expenditures of such funds on projects that otherwise qualify for financing under the Federal Aid Urban System Program, similar to the program that now is provided for in the procedures for use of the California State Gasoline Tax, and be it further

Resolved, That the U.S. Senators from California and the California Delegation to the U.S. Congress be requested to consider such legislation as emergency requiring urgent action by the Congress, and support such an effort accordingly.

LOUIS R. NOWELL,
Councilman, First District.

NEW YORK STATE
DEPARTMENT OF TRANSPORTATION,
Albany, N.Y., August 20, 1975.

MICHAEL J. LAZAR,
Administrator, New York City Transportation Administration, Office of the
Administrator, New York, N.Y.

DEAR MR. LAZAR: I read with interest your prepared statement given on behalf of the National League of Cities and the Conference of Mayors before the Senate Public Works Committee of July 24, 1975. While I obviously do not agree with your position on direct apportionment of Federal highway funds to the "urbanized areas," my purpose is to speak in this letter to those matters covered in the colloquy between yourself and the Committee following your presentation. In reviewing a draft transcript of the colloquy, I find several statements made by you which are inaccurate or untrue. In order to correct the record, I have taken the liberty of sending the attached letter to Senator Bentsen.

In your written testimony to the Committee you cite the "highly skilled and sophisticated state-city relationship" established between ourselves. I hope that this cooperative relationship can be maintained and improved in the future. Rather than creating the erroneous impression in people's minds that there are State-City problems that have adversely affected the successful implementation of the Federal legislation, it would be more productive for us to act cooperatively toward our common objective of a Federal program which will meet the demonstrated transportation needs of the people of both the City and the State in the most efficient way.

We are not in an adversary position with the City. We have joined you in battling the Federal restrictions and standards that are completely inappropriate to the urban system program. We have been outspoken in articulating our common cause. We have used our good offices in the City's behalf. We have also been able to enlist the Governor's support and that of the Legislature.

We are proud that the City and State joined in being the first in the nation to take advantage of the transit transfer provisions of the urban system program. This shows that we can and do work effectively together in a common purpose. Together, we also were national leaders in the magnitude of the TOPICS program. Nor has this been limited only to the highway program. Under State leadership we were able to pull together the many governmental agencies and transit operators in the New York City Metropolitan area to be the first in the nation to implement the new Section 5 program of the Urban Mass Transportation Act. Likewise, we were the first in the nation to take advantage of the new Section 3(h) provision of the Act. These accomplishments are hardly examples of the need to bypass the State. Rather they simply could not have been accomplished without the active involvement and leadership of the State, not to mention the fact that the State has been putting up the matching funds for these programs, thus making them possible in the first place.

Let's continue to work together and to build on our successes.

Sincerely,

RAYMOND T. SCHULER, *Commissioner.*

NEW YORK STATE
DEPARTMENT OF TRANSPORTATION,
Albany, N.Y., August 20, 1975.

HON. LLOYD BENTSEN,
Chairman, Subcommittee on Transportation
U.S. Senate, Washington, D.C.

DEAR SENATOR BENTSEN: It has been brought to my attention that in his testimony before the Subcommittee on Transportation given on July 24, 1975 on behalf of the National League of Cities, Michael J. Lazar, Transportation Administrator of the City of New York, made a number of misleading and inaccurate statements concerning the relationship between the State and the City in regard to the planning and implementation of the Federal-aid Urban System program.

While I do not agree with Mr. Lazar's argument that direct apportionment of Federal highway funds to the urbanized areas is the panacea for the urban program, I am not writing to refute that argument, but merely to correct certain misstatements of fact and the erroneous impression conveyed by Mr. Lazar to the Subcommittee concerning the New York City FAUS Program.

In the following attachment are a number of quotes from a transcript of Mr. Lazar's oral remarks made to the Subcommittee in answer to questions which I feel are inaccurate and must be corrected for the record.

In your deliberations upon the future relationships, roles and responsibilities of the Federal government, the states and the various local levels of government, in relation to the construction and maintenance of our highway and transportation systems, I hope that the remarks made by Mr. Lazar do not mislead the Committee and result in an ill-advised and unworkable Federal program.

Thank you for your consideration of my remarks. I am furnishing a copy of this letter to Senator Jennings Randolph since he questioned Mr. Lazar about his allegations at the hearing, and to Mr. Joseph Coupal, Jr. because of his inquiry as to the allegations.

Sincerely,

RAYMOND T. SCHULER, *Commissioner.*

Attachment.

COMMENTS OF RAYMOND T. SCHULER, COMMISSIONER, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, ON ORAL TESTIMONY PRESENTED BY MICHAEL J. LAZAR BEFORE THE SENATE PUBLIC WORKS SUBCOMMITTEE ON TRANSPORTATION ON JULY 24, 1975

MR. LAZAR. "... The urban system to which we refer, of course, became a responsibility for specific designations of State highway departments. So the urban street system which we have under the program was created by the State department of transportation and not the act of the local authority."

As Senator Randolph pointed out, according to law "Routes on the Federal-aid urban system shall be selected by the appropriate local officials . . . with the concurrence of the State highway departments." In New York State both the letter and the spirit of the law were scrupulously observed. The maps defining the Urban System were approved and signed in April 1972 by Mr. Lazar's predecessor as Administrator of the City Transportation Administration, C. Sidamon-Eristoff. Without his agreement to the proposed system as the "appropriate local official," the map could not be accepted by the Federal Highway Administration. Subsequently, the maps were amended five times during 1974 and 1975 at the request of Mr. Lazar to include additional segments of the highway and street system.

Mr. LAZAR. "It was violated, I am sure, in spirit at the outset when the very mapping of the system took place under State direction for the first thing."

The selection of routes to be included on the Urban System was carried out with the active participation of both City and State staffs. Although the maps were physically prepared by the State as an expedient to get the program initiated, in all cases the selected routes reflected the choice of the "appropriate local officials" representing the City. While "at the outset" it was "selected" under the '70 Act (in cooperation with each other), subsequent changes were made under the '73 Act (designated by appropriate local officials, with the concurrence of the State).

Mr. LAZAR. ". . . for example, we found ourselves with FAUS moneys being used to eliminate grade crossings in a program which the State might well have obligated itself to do otherwise."

At no time have FAUS funds earmarked for use in the New York City Urbanized Area been used for projects other than those proposed by the appropriate local officials. In this statement Mr. Lazar is referring, I believe, to the financing of the construction of a project known as The Merrick-Belmore Project in Nassau County. This Long Island Railroad grade crossing elimination project was financed in part with urban funds apportioned under the 1970 Federal-aid Highway Act, which were not earmarked for any particular urbanized area in the State. Under the 1970 law the State was obliged to select projects in cooperation with appropriate local officials in accordance with priorities developed at that time, and this met the criteria for a high priority project.

Mr. LAZAR. ". . . I really never knew how much money indeed was being allocated to the City of New York until most recently, two years after the Act's passage."

I agree that Mr. Lazar has a point. Section 150 of Title 23 gives each state the responsibility of developing a "fair and equitable" formula to allocate FAUS funds to the urbanized areas within the State and to the cities of over 200,000 population. In New York State the problem was not allocation to the urbanized areas, but an equitable suballocation to New York City and Yonkers (cities over 200,000) vis a vis the remainder of the New York City urbanized area.

The State's attempt to develop a reasonable formula agreeable to all the affected jurisdictions unfortunately consumed considerable time. We were considering several alternatives to using population alone. These considered such things as highway needs, total transportation needs, etc., besides population. However, throughout that time the various jurisdictions were given a "planning target" amount based on the formula we were leaning toward (which weighed population and highway needs equally) and they were advised to program projects accordingly. The target for New York City was tentatively set at \$115 million.

New York City submitted projects totalling \$187 million, more than even the most liberal formula would have provided so the City's planning was not constrained by the "planning target" figure.

As was pointed out to the urbanized areas, including New York City, the "planning target" figures were not reduced to account for impoundment, which at that time was running about $\frac{1}{2}$ of the total apportionment. This gave the urbanized areas leeway in their planning and in every case the planning target was much greater than any of the alternative formulas being considered, if adjusted for impoundment would have provided.

In the final analysis, our hope was to be able to gain acceptance for a formula that to some extent reflected both highway and transit needs. We also hoped to be able to make 100 percent of the Federal allocation available to the urbanized areas by absorbing the full effect of impoundment in the State's own program. Of course, the elimination of impoundment made this academic but it also did not then require an upward revision of the planning targets.

However, it was ultimately judged impossible to gain general acceptance of any alternative formula so a population formula was used. This meant that the New York City share of the New York Urbanized Area apportionment was not finally settled until just recently. However, the basic cause of the delay was the difficulty in gaining acceptance of an equitable distribution formula.

Mr. LAZAR. "... Mr. Chairman, the only FAUS project approved by the State was an expressway which did not relate directly, immediately I should say, to the needs of the city. . ."

I believe that Mr. Lazar is referring to the West Shore Expressway on Staten Island. Attached is Mr. Lazar's letter of February 21, 1974 to the State Department of Transportation requesting that the project be constructed under the Federal-aid Urban System program. The letter requests we "expedite construction" of this "long-awaited route." In progressing this project the State was acting in conformance with Mr. Lazar's specific request. In addition, other projects the City has requested have also been advanced to obligation (see next below).

Mr. LAZAR. "On the other hand, the other 20 projects which we thought we had agreed with the State as being the next up, so to speak, that we have agreed on what those guidelines would be and how indeed we would implement those projects have not gotten off the ground during that same period of time."

Although a number of project lists had been transmitted to the State previously, it was not until September 20, 1974 that the New York City Transportation Administration, in accordance with the requirements of Section 105 (d) of Title 23, submitted to the State a list of FAUS projects with a total cost of \$115 million. Five of these projects, totalling \$61.3 million, were for transit improvements. At the same time the City submitted a "Secondary List" of backup projects with a total cost of \$72 million. Upon completion of our review of the projects and meetings with the City, the list of highway projects was submitted to the Federal Highway Administration on February 20, 1975. After review by the Federal Highway Administration and the Urban Mass Transportation Administration, Federal approval of the Program of Projects was given on May 15, 1975. All of these projects are being advanced as quickly as possible. To date over \$78 million of New York City's three year allocation of \$172 million in FAUS funds have been obligated.

Mr. LAZAR. "Ocean Parkway was designed in essence by the city somewhat over two years ago and submitted to the State for design considerations."

After a year of negotiation and communication and discussion with the State, we were told that the Feds did not establish their guidelines sufficiently and fully formulate to apply to this particular project."

The Ocean Parkway project was designed by the City before there was any intention to use Federal funds for its construction. Therefore, it was not designed with an eye toward meeting Federal requirements. From the initiation of the FAUS Program the City has adamantly refused to revise already completed designs so as to meet Federal requirements or to recognize or follow the Federal design standards and guidelines for design of any new FAUS projects. Rather than comply with the Federal standards, repeated requests and appeals for revision and relaxation of design standards have been made. This was especially true in connection with the Ocean Parkway project. The City's inability or unwillingness to comply with established Federal requirements were the cause for the delay of this much needed project. It should be pointed out that the State worked actively toward resolving the City-Federal impasse and agreed with the City that strict application of long standing Federal design standards were inappropriate for the urban environment where FAUS projects are located. The desire of the City to make the Ocean Parkway project a "test case" caused all other FAUS projects with design standard questions to be held up pending resolution of the Ocean Parkway issue.

Mr. LAZAR. "We have lost two years, \$55 million of built-in planning and during that period the State has used much of the funding here for programs which were not truly within the direct spirit of the FAUS program."

As stated above, there has been no loss of funds to New York City or any urbanized area, nor has the State advanced any projects by other than complete conformance with both the spirit and the letter of the legislation. All projects being advanced with FAUS funds earmarked for New York City are in accordance with an approved program of projects, initiated by the City Transportation Administration and endorsed by the municipal planning organization, concurred in by the State and approved by either FHWA, UMTA, or both.

CITY OF NEW YORK TRANSPORTATION ADMINISTRATION,
New York, N.Y., February 21, 1974.

Mr. A. H. EMERY,
Regional Director, New York State Department of Transportation,
Babylon, L.I., N.Y.

DEAR MR. EMERY: In reply to your letter of January 31, 1974, and based on subsequent clarifications through discussions between our staffs, I request, as Transportation Administrator, on behalf of the City of New York, that the West Shore Expressway-Section II, be constructed under the Federal-aid Urban System program and that the necessary system changes be initiated by your Department.

It is my understanding that this procedure will enable the contract to be let this Spring and thus expedite construction on the last remaining section, thereby completing construction on this long-awaited route connecting the Outerbridge crossing with the Staten Island Expressway.

Very truly yours,

MICHAEL J. LAZAR, Administrator.

NEW YORK CITY TRANSPORTATION ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR,
New York, N.Y., September 12, 1975.

Hon. LLOYD BENTSEN,
Chairman, Subcommittee on Transportation,
U.S. Senate, Washington, D.C.

DEAR SENATOR BENTSEN: This is in response to the letter of Raymond T. Schuler, Commissioner of Transportation of the State of New York, dated August 20, 1975 and sent to yourself and Senator Randolph. Also enclosed is my letter to J. R. Coupal of FHWA who prompted this exchange.

Reference is made to the attached since I believe it makes clear my previous testimony before the subcommittee on Transportation on July 24, 1975 and the position of the National League of Cities and the United States Conference of Mayors, to wit: the institutional and intergovernmental relationships created under the 1973 Highway Act with reference to FAUS have placed in the states an undesirable excess of bargaining power which has not served to advance the objectives of the 1973 Act.

Under the Act the states are an unnecessary intermediary between the large cities and the Federal Government with regard to urban highway programs. This has caused a proliferation of red tape, the exacting of concessions to the states by the cities when none should be required and the manipulation and substitution of funds and projects by the states to the detriment of cities. In some cases throughout the country there has been a competition and confiscation of FAUS funds by states, examples of which are being compiled by the NLC and USCOM.

In my testimony on their behalf I made reference to these practices but I did not make any such allegations as to the State of New York. Rather, from my personal experience, I sought to demonstrate the inequities and harmful results of the negotiating leverage states now exercise. In the most direct terms: Cities must have state approval to spend their federal money matched by their tax revenues. This often results in a frustration of the cities' priorities and needless delay. It should not be, particularly with the safeguard of regional planning ingrained in the process.

In Mr. Schuler's letter, signed by Mr. Hennessy, I am charged with making "misleading and inaccurate statements" in this regard. Selected excerpts from colloquy follow with refuting comments.

I do not think it helpful for New York State and New York City to engage in bickering as to details, particularly when care is and always has been taken to let the public record not reflect the disagreements of negotiation. I would like to make some general comments, however, because I did not make false statements and because I consider this underlying issue of the intergovernmental relationships within the 1973 Highway Act to be one of paramount importance to the nation's cities.

Commissioner Schuler's letter says that no earmarked FAUS funds have been used for projects not within New York City. That is correct. But there is not reference to funds that should have been earmarked for New York City, where the state and not the city and not the federal government do the earmarking.

In 1974 I was advised by State officials that funds earmarked for New York City would be applied to TOPICS programs previously approved that were to have been funded from 1970 Act funds. The reason that the 1970 funds for New York City were no longer available was that they were spent by the State on projects not within New York City. I objected then and I object now. Regardless of the after-the-fact explanations the bottom line is that NYC lost more than \$30 million for which it had been previously programmed. I cannot believe this substitution was the intent of the Congress when it promulgated the 1973 Act.

Mr. Schuler states that "there has been no loss of funds to New York City. . . ." In light of the above this is not an accurate statement. It is similarly untrue due to the simple, abhorrent fact of inflation. Funds not spent are funds that are lost and funds delayed are funds dissipated. For the period 1971-1975 the rate of inflation for highway construction costs was approximately 61%. It was 26% for the first three months of 1974 alone.

As a former trial lawyer I am well aware that there are many sides to any issue and further debate as to specifics on Mr. Schuler's comments will serve only to illustrate that fact. My testimony was carefully constructed and was intended to be constructive. I stand by it.

The NLC and USCOM and I hoped to stir debate about the merits of the direct apportionment issue. I believe this entire exchange illustrates the underlying folly of the Federal-State-City intergovernmental relationships that evolved under the 1973 Highway Act and they should be scrutinized in the 1975 Highway Act debate.

Thank you for your attention.

Sincerely yours,

MICHAEL J. LAZAR, *Administrator.*

NEW YORK CITY TRANSPORTATION ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR,
New York, N.Y., September 12, 1975.

Hon. J. R. COUPAL, Jr.,
Deputy Administrator, U.S. Department of Transportation,
Washington, D.C.

DEAR MR. COUPAL: This is in response to your letter of July 29, 1975 with reference to our appearance before the Transportation Subcommittee of the Senate Public Works Committee, July 24, 1975.

As you know, I was testifying on behalf of and at the request of the National League of Cities and the U.S. Conference of Mayors. It is the position of those organizations as representatives of the nation's cities that the cities seek three primary objectives in the 1975 Highway Act:

(1) Direct apportionment of urban system funds similar to the direct apportionment of Section 5 operating assistance under the National Mass Transportation Act of 1974; and

(2) A consolidation of the present diverse categories of highway assistance into bloc grants of interstate, rural, urban, safety and beautification funds; and

(3) Refinement of the interstate transfer provisions so that transferred funds can be used for multiple transportation purposes on a 90/10 basis with the funds available for immediate obligation.

With regard to the direct apportionment of urban system funds, the League and Conference have been conducting a survey of state highway departments which shows that the good purposes of the 1973 Act with regard to local control have not been achieved. In the judgment of the cities, the state highway departments exercise too much control over the apportionment of these funds and this is particularly evident in the selection of projects to be funded under the urban system. Thus, the 1973 Act intends there to be a "bottoms up" process whereby the ultimate recipients of FAUS funds select the projects to be funded with state review to follow. In practice, however, the state's review has very frequently resulted in a veto function. As a result of this imbalance, city-state negotiations have often resulted in the placement of formerly primary system projects within the FAUS system.

This phenomenon is very evident in California where 750 miles of previously designated primary projects have been made part of the FAUS program. In Orange County alone one-third of the FAUS funding is for previously listed primary projects. There are similar examples in Virginia (Alexandria), Illinois, Missouri (St. Louis and Kansas City), and Maryland. The effect of such actions,

which are by no means limited to the states outlined above, has been to allow states to discharge their highway program responsibilities in urban areas by imposing their primary projects upon the FAUS program which is intended to be the vehicle for meeting an expanded federal transportation program responsibility to urban areas.

This distorted process of city-state negotiations is one reason why out of an appropriation of \$1.78 billion for the period FY '74-'76 only \$635 million has been actually obligated. A significant portion of that money was spent on TOPICS programs previously approved. Ohio is a striking example: Only 10% of Ohio's FAUS funds has been obligated, none in Cleveland.

I regret that my remarks were interpreted by some as animus to the State of New York or as descriptive only of the New York City-New York State highway situation. I stated that there exists a highly skilled and sophisticated city-state relationship in New York. I did not and I do not charge New York State with the "confiscation" of FAUS funding. But it is my perception based on personal experience that the institutional relationships created by the 1973 Highway Act grant any state, including New York State, an undesirable excess of bargaining power with reference to highway funding negotiations. Thus, in New York State, negotiations progressed in a fashion whereby the City agreed to the placement of previously designated primary projects and previously approved TOPICS projects within its FAUS program. This was done reluctantly and as a concession. I stressed in my testimony that no FAUS highway project negotiated since passage of the 1973 Act has progressed to the point of construction with the single exception of the West Shore Expressway which previously was a primary system project.

These institutional problems are further reflected in the inability of the State and City to agree on the actual level of the City's FAUS funds. As I noted in my testimony, there was a discrepancy of \$57 million between the State and the Federal Government as to the NYC FAUS share. The State initially advised the City to program an appropriation of \$115 million. But at no time did the State ever reveal to the City its "fair and equitable" formula which arrived at that amount. Two years later, the State finally adopted the population formula urged by Federal DOT which granted the City \$57 million additional funds only now being programmed three years after passage of the act. Moreover, there is a serious City-State disagreement (it is not a City Transportation Administration-State DOT disagreement) as to the State's responsibility for the provision of FAUS matching shares.

You asked for specifics as to the primary system projects funded on the urban extension system carried out with urban system funds. I will ask the National League of Cities and the U.S. Conference of Mayors to provide these in some detail. With reference to New York and with the understanding that I do not charge violations of the law but lament a frustration of the intent and spirit of the law, examples include the West Shore Expressway, the funding of several overpasses in Nassau County including one in Belmore, N.Y. and bridge replacement projects not within the New York City urbanized area.

Please do not hesitate to contact me if you desire further discussion.

Very truly yours,

MICHAEL J. LAZAR, *Administrator.*

AFTER RECESS

[The subcommittee reconvened at 2 p.m., Senator Jennings Randolph (chairman of the full committee) presiding.]

Senator RANDOLPH. We will continue our hearings in the Subcommittee on Transportation, as we consider the information which is helpful to us from many, many sources, as we prepare and draft and hopefully pass a well reasoned Federal-aid highway bill during this year.

We are constantly faced with rollcalls in the Senate, particularly on certain legislation on which many amendments are offered.

I renew for the record the constant criticism that I hope I voice in good humor, but also in an earnestness that I think we have to bring to the discussion.

Some day I hope the Senate will have committee days and legislative days. I have been advocating it for a long time. How you can go back and forth to the Senate and vote on an amendment or amendments, that frankly do not have to be printed, then rush in, trying to listen to the witness here, and make a hurried departure and reach the floor within 15 or 10 minutes. Then again, to hurry back and try to check the continuity of the testimony or the colloquy in the hearing.

We continue to discuss it but do nothing about it. I am really unable to understand why it is so difficult to program committee days when you have hearings and have legislative days that aren't uninterrupted.

I am not asking you to take on this task. This is something we will have to work out, of course, here on the Hill. But tradition is something that can't perhaps easily be overcome.

I would quote the words of Abraham Lincoln which were used on another occasion. He said, "The dogmas of the quiet past are inadequate for the stormy present." He said we must think anew; we must act anew; we must disenthral ourselves.

I think that it is important that I mention this to all of you who are familiar with the process of testimony.

We are happy to have you, Mr. Cianchette. Introduce your colleagues.

STATEMENT OF IVAL R. CIANCHETTE, CHAIRMAN, HIGHWAY DIVISION, THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, ACCOMPANIED BY JOHN ELLIS, ASSISTANT EXECUTIVE DIRECTOR AND ROGER ALLAN, DIRECTOR, HIGHWAY DIVISION

Mr. CIANCHETTE. My name is Ival Cianchette, president of Cianbro Corp., a highway and heavy construction company of Pittsfield, Maine. I am also the chairman of the highway division of the Associated General Contractors of America and I appear before you today in that capacity.

I have with me on my left, John Ellis, assistant executive director of the Associated General Contractors; on my right, Roger Allan, director of the highway division of the Associated General Contractors.

We appreciate this opportunity to present our views on the future of the Nation's highway program. We will discuss particularly what we see as the Federal role in the highway program—which is the specific subject you are covering today—and then submit for the record our views on the overall Federal-aid highway program, including the future of the highway trust fund.

As you can appreciate, we feel our particular expertise is the construction of highways so our major emphasis will be in this area.

In preparation for this hearing we circulated among our highway contractor members your letter of June 20, 1975, asking them to comment on the questions to which you are seeking answers today.

Since the principal question has to do with the intergovernmental relationships that exist in the highway program, we would like to answer that generally, then we will go to some of your specific questions.

At issue in 1975 is the manner in which the Nation's highway program will be administered and funded and for how long.

It is our view that the present Federal, State, private industry relationship must remain intact, that the highway program must be better funded than it is presently, that the highway trust fund must be continued in at least its present or a broader revenue-producing form, and that the fund must be maintained for highway purposes only.

We feel, without question, that the Federal, State, private industry relationship that has been established in the highway program is the reason for its success and that this relationship must continue.

The Federal role has been one of collecting Federal taxes and dispersing them among the States on a basis proportioned to their size, population, and road network. This role has been necessary because of the interstate characteristics of most of our road network.

Of obvious and paramount importance is the Federal Government's predominant responsibility for our National System of Interstate and Defense Highways. Of equal importance, in our view, is a continuing Federal presence in the development of our primary and secondary systems in both urban and rural areas.

We think it must be recognized and the concept should be impressed on all our citizens that our highways are our national transportation system and that primary and secondary roads are a vital part of this system. The Federal Government can be most effective in funding and coordinating these road systems.

The bill you write this year should deal fairly with highway needs in both urban and rural areas. This is the reasoning behind our recommendation that rural primary and secondary highway program authorizations be increased substantially to amounts no less than the totals proposed for urban highways and public transit assistance.

Highway needs are great throughout the country and we must not let ourselves fall prey to urban-rural rifts. The Federal Government can play a major role in seeing that this does not come about.

The number of categories in the Federal aid highway program has been questioned and we have been drawn into this debate. Here again we feel this issue has divisive tendencies that could be detrimental to the overall program.

Of the 32 categories in the Federal-Aid Highway Act of 1973, 19 of them draw funds from the highway trust fund. We think that the highway trust fund and the programs it supports could be a great deal more useful if States were permitted more latitude in determining which specific programs should be funded during a given year.

The temporary authority granted to States by Public Law 94-30 enabling them to transfer funds among noninterstate categories is the kind of categorical flexibility that should be encouraged in new legislation.

Highway safety is of major concern to all of us and we would like to state here some thoughts on this subject.

We would note at this point the administration's highway proposal and remind you again of our view that we must not get drawn into urban-rural splits over this legislation.

The administration bill invites such a split in the all important area of safety. Under its proposal, the apportionment formula for funding safety projects would be drastically changed in that three-fourths of the apportionment would be based on population.

Actually, higher injury and fatality ratios are to be found on the secondary and off-system roads more so than on roads in urban areas which have a greater population base.

Under the administration's plan, we see a further reduction in safety programs in rural areas as regards the special bridge replacement problem. There are some 527,000 deficient bridges on our Nation's highways; 90,000 of which are in need of immediate improvement.

The 1974 Federal Highway Amendments increased the funding for this program to \$125 million for fiscal year 1976. Under the administration's proposal, the total safety program for the next 5 years would be \$400 million annually.

Only 30 percent of these sums apportioned to each State may be used for the replacement of inadequate bridges. This is a reduction in this vital program of \$5 million under what the 1974 amendments would allow for fiscal 1976. One of the national priorities of the Federal-Aid Highway Act of 1973 was to increase the safety factors of our Nation's roads, not reduce them.

I would like to close by listing for you our recommendations on implementing a transportation program this year:

1. Continue the highway trust fund in its present form with the same or greater revenues going into the fund.

2. Complete the Interstate System Network, in both urban and rural areas, as soon as possible to bring its proven economic and life-saving benefits to bear on the constantly growing transportation needs of both city and rural areas.

3. Make more intensive and immediate use of the provisions of the 1973 Federal-Aid Highway Act to assist highway-based mass transit with special bus lanes to provide rubber tired mass transit to the central business district and elsewhere as needed, in addition to bus shelters, parking areas, and the like.

4. Promote further innovative use of an integrated public transportation system that would utilize buses, taxis, and jitneys, each one in its most efficient and effective manner.

5. Make an all-out drive for relieving traffic congestion on urban arterial streets through safety and traffic improving projects which are relatively small in scope but carry great lifesaving potential.

6. Bring substantial early relief to commuter traffic congestion by much greater use of car pools, van pools, and bus pools.

7. Increase substantially the rural primary and secondary highway program authorizations to amounts no less than the totals proposed for urban highways and public transit assistance.

8. Give greater emphasis to elimination of the deficient bridges that exist throughout the country by increasing the size of the special bridge replacement program beyond the authorizations contained in the Federal-Aid Highway Amendments of 1974.

9. Include the off-system road program as a separate Federal aid system category with expanded funding from the highway trust fund.

10. Create a separate urban mass transit fund, similar to the highway trust fund, by which to support those public transportation systems which can be found to be economically and socially necessary.

Mr. Chairman, we have made a rather thorough review of the various

positions, studies, and statements of Government agencies, transportation experts, and others, on the potential of rail mass transportation as it related to rubber tired mass transit.

The findings are extremely interesting in that they definitely support the position that rubber tired vehicles are definitely the most economical, most flexible and cleanest forms of mass transportation available.

We would like, with your permission, to have the report we have prepared be made a part of the record of these hearings. If this can be done, we will send the report over to you early next week.

Thank you, Mr. Chairman, for the opportunity to discuss our views with you.

Senator RANDOLPH. That is agreeable.

[The report referred to follows:]



THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

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JAMES W. ANDRUS, Executive Director

July 31, 1975

Honorable Lloyd M. Bentsen
United States Senate
Washington, D. C. 20510

Dear Senator Bentsen:

When AGC testified before your Transportation Subcommittee on July 24 we asked and were granted permission by Senator Randolph to have additional material included in the record. We would, therefore, appreciate having the enclosed report, "Mass Transit - Putting the Problem Before the Solution: A Summary of Existing Governmental and Institutional Research," made a part of the record in connection with AGC's testimony on transportation.

In this report we have analyzed a number of studies on the relative benefits and costs of various modes of mass transit. These were studies made by the Department of Transportation and other research organizations.

We consider these to be impartial sources and for this reason we are pleased that many statements in them support our own point of view, namely, that rubber-tired vehicles provide the most economical, most flexible, and the cleanest form of mass transit available.

We are pleased to submit this for your information and for the record.

Sincerely,

J. M. Sprouse
J. M. SPROUSE
Executive Director

Enclosure

MASS TRANSIT

Putting the Problem Before the Solution:

A Summary of Existing Governmental and Institutional Research

PREFACE

In the last decade mass transit - and in particular, rail transit - has been viewed as the "cure-all" for the transportation problems of our cities.

The Associated General Contractors of America believes that mass transit improvements are necessary. The way to provide these improvements is through better utilization of better road facilities.

Because:

The most economical, most flexible, cleanest forms of mass transit are and will continue to be rubber-tired vehicles.

SUMMARY OF FINDINGS

From 1945 to 1973 there was a large decline in the use of mass transportation, nationally.¹ However, recent cries for construction of more mass transit facilities have arisen primarily as a result of the gasoline shortage and public demands to reduce air pollution.

Specifically, it is held that mass transit could: lure people out of their autos; increase the air quality of urban areas; cut down on energy consumption; provide a mode of inner-city transportation for persons unable to own cars or drive; reduce traffic congestion in cities with high population densities; and provide low-cost public transportation that would eventually pay for itself. Any evaluation of mass transit must be based on how well various modes of transit succeed in reaching these goals.

The essential theme of this report is that Congress, the Department of Transportation (DOT), consumer groups and universities have compiled a great deal of data on mass transit over the last three years -- enough to form some firm conclusions concerning the limitations and future development of public mass transportation. In brief, these conclusions are:

1. Depending upon the size and density of an urban area and the particular mode of transportation, public mass transit can *increase* traffic congestion in inner-city areas, *increase* pollution levels, and *increase* highway gasoline consumption.

¹ "'Last Hope' Effort for Mass Transit: Where 12 Billions in Aid Will Go," *U. S. News and World Report*, Vol.77, No.26 (Dec.23,1974), p.44.

2. Many, if not most forms of mass transit *cannot* reach a majority of persons who are unable to use existing transportation facilities.

3. Fixed-rail mass transit involves enormous expenditures, which can *never* offer any return on the original investment and which incur huge annual operating *deficits*. Massive government subsidies will be necessary.

4. Most forms of rail mass transportation require large amounts of electrical power and many areas presently cannot support this increased load. The increased generation of electricity necessary to support electric rail transit may drive up the price of electricity for all consumers.

5. For almost all urban areas, *rubber tired transit*, particularly bus and para-transit systems, will be the most efficient, energy-saving and practical way of increasing the capacity of urban transportation in years to come. Automobiles will continue to be the primary mode of transportation until at least the year 2000. Within the next five to ten years Americans will be driving much more energy-efficient cars than they are at present.

6. Given all the above considerations, a well designed, integrated system of city streets and highways will be at the heart of any *balanced* system of urban transportation, mass or otherwise. An *increased* level of federal-aid highway spending is mandated to meet these needs.

ENERGY, POLLUTION, CONGESTION AND ACCESSABILITY OF MASS TRANSIT

Behind the impetus to expand mass transit facilities is the claim that mass transit will reduce gasoline and overall energy consumption, automobile exhaust pollution and traffic congestion.

Studies reveal this is *not* at all the case.

Alan Voorhees and Associates reports that, in terms of average vehicle occupancy (and with all units of energy converted to gasoline on the basis of British Thermal Units), a standard auto with three occupants is still 3 to 6 passenger miles per gallon more energy-efficient than many types of mass transit, including "kiss and ride" to rail transit in cities such as New York, San Francisco and Chicago, and the "kiss and ride" to express bus systems. A standard auto with four occupants and a small auto with two occupants are both more energy-efficient than all of the above modes of transportation as well as "park and ride" to rail systems in cities such as Chicago,² to express bus systems and to commuter rail set-ups.

A report in late 1974 by the U. S. Department of Transportation and the U. S. Environmental Protection Agency estimates that, "It is practical to achieve by a variety of means a 20% fuel economy improvement in the new model [automobile] fleet of 1980 compared to 1974 with little further price increase. The full range of potential improvements... is from 40 to 60 percent...."³ The study says gas improvements can be made by:

² Don McChesney and Alan M. Voorhees, "Energy Efficiencies of Urban Passenger Transportation," *Tank Notes*, (McLean, Va.: Alan M. Voorhees & Assoc.), Vol.1, No.15 (June 1, 1974), p.9. For "kiss and ride" to rail figures, see Alan M. Voorhees & Associates cited in John H. Jennrich, "Comparison of Efficiencies," *Highway User Quarterly*, Summer, 1974, p.18.

³ U. S. Department of Transportation and U. S. Environmental Protection Agency, "Potential for Motor Vehical Improvement," a report to Congress (Washington: DOT and EPA, 1974), p.1.

changing the design of automobile engines, tires and body; reducing the size of the engine for larger cars; and shifting to a larger percentage of smaller cars in the fleet.⁴ By improving the gas mileage of automobiles, any energy advantages which mass transportation vehicles may presently have diminish even further, and the comparative disadvantages of mass transit increase,

Many experts, such as senior Brookings Institute fellow Walter Owens, claim that construction of permanent mass transit structures leads to the building of high-rise business and residential structures in the transit corridor. Urban population density is further increased. *Since only a small percentage of the additional population uses the mass transit facility, traffic congestion worsens.*⁵ Owens urges that further mass transit construction be discouraged.⁶

A report by the Committee on Local and Urban Affairs of the 1975 Minnesota State Legislature states, "We have heard testimony that elsewhere in the nation, fixed guideways are actually increasing congestion, inconvenience, and pollution, especially around neighborhood stations, at intersections, and in the downtowns."⁷ The report advised against construction of a fixed-rail system in the Twin Cities area.⁸

Most of the rail mass transit proposed for urban areas

⁴ Ibid., p.22.

⁵ Walter Owens cited in Bruce E. Thorp, "Transportation Report/Federal Funds for New Transit Systems Going Up Despite Criticism of Present Technology," *National Journal*, Vol.4, No.41 (Nov. 25, 1972), p.1814.

⁶ Ibid.

⁷ Representative Tom Berg, Chairman, Committee on Local and Urban Affairs and Representative Pete Petrafeso, Chairman, Subcommittee on Social and Economic Development, "Metropolitan Transit," unpublished report from the 1975 Session of the Minnesota State Legislature, p.12.

⁸ Ibid., p.3.

would operate on electricity. Thus, such systems will substantially burden local electric power-generating resources *which in many places are already deficient*. The capital cost of new power plants is prohibitive and power plant construction requires lengthy lead times.

The Minnesota report explains, "If we face not merely a shortage of petroleum but of energy, we may discover that by building electrified fixed guideways we have impaired our capacity to produce enough electrical energy to satisfy our other needs."⁹ With conventional coal generators still producing the largest share of electrical power in the United States, coal prices could increase causing a rise in electric bills for all consumers.

An official of the now defunct White House Office of Science and Technology (OST), Jack I. Hope, criticized mass transit projects such as the new San Francisco and Washington, D. C. operations. According to Hope, "The systems that DOT is trying to demonstrate now will not solve the congestion problem because they [the systems] will not draw people away from their cars...."¹⁰ Hope concludes, "I just don't think mass transit will work as long as people have a choice of driving their automobiles."¹¹

This prediction is substantiated by the latest data on the use of San Francisco's Bay Area Rapid Transit (BART) system.

Although it was originally predicted that 61 percent of BART's riders would come from automobiles, statistical surveys

⁹ Ibid., p.10.

¹⁰ Thorpe, p.1809.

¹¹ Ibid., p.1812.

reveal 54 percent of the BART trans-bay riders come from *commuter buses*. In fact, as few as one third switched from cars and 25 percent of those who did switch from autos had formerly been in car pools. The rest of BART's customers were new riders, most of whom were presumably shoppers.¹²

To maximize customer usage, fixed-rail mass transit is often planned in a radial design -- transporting commuters from the suburbs to key locations in the central city. Thus many of the inner-city residents who are unable to afford or use automobiles similarly find little value in rail transit. The Committee on Local and Urban Affairs of the 1975 Minnesota State Legislature concludes, "To those without the private automobile -- the aged, the infirm, the young, the poor, and those who choose to do without -- the guideways would be of little use. To some they would be inconvenient to get to; for others, too difficult to get on. For most, going the wrong places."¹³ It was estimated that no fixed guideway system that could be built would pre-empt more than 6 or 7 percent of the trips in the region.¹⁴ The assumption that all mass transit benefits the transportation-disadvantaged remains unsubstantiated.

¹² "Trouble in Mass Transit: Why Can't the People Who Put a Man on the Moon Get You Downtown?" *Consumer Reports*, Vol.40, No.3 (March, 1975), p.191.

¹³ Berg and Petrafeso, p.8.

¹⁴ Ibid.

COMPARATIVE COSTS OF BUS AND FIXED-RAIL MASS TRANSIT

The costs of mass transportation vary according to the mode of transit. The claim that fixed-rail systems would pay for themselves has proved totally erroneous. The capital cost of building rail projects is enormous and operating costs have been much larger than anticipated. In short, buses cost less.

One pilot mass-transit program, the so-called "People-Mover" project at West Virginia University in Morgantown, was centered around an elevated fixed-guideway system with 3.3 miles of guideway, 6 stations and 80 to 100 cars. The total cost of this program was to be about \$13.5 million.

The plan for the People-Mover was later scaled-down to 3 stations, 45 cars and a change in the type of guideway used.¹⁵ The price tag of this reduced project (about half the size of the original), was about \$59.3 million. *Even in its drastically scaled-down form, the People-Mover has cost four to five times the estimate of the \$13.5 million original project.* Although the University has now agreed to keep the reduced system for the present, there had been a strong possibility that West Virginia University officials would exercise an option in their contract to have the guideway system torn down if the Federal government did not furnish additional funds to expand the project.¹⁶

The cost as of March 1975 of the Bay Area Rapid Transit system in San Francisco was \$1.6 billion,¹⁷ a 16 percent overrun.

¹⁵ "'People-Mover' Project - In Danger of Becoming a \$64-Million Fiasco," *U. S. News and World Report*, Vol. LXXVI, No. 17 (April 29, 1974), p. 37.

¹⁶ *Ibid.*

¹⁷ "Trouble in Mass Transit: Why Can't the People Who Put a Man on the Moon Get You Downtown?" p. 190

The projected cost of the Washington, D. C. Metro rail system rose from \$2.5 billion in 1969 to \$4.5 billion in 1974.¹⁸

One of the alleged advantages of rapid rail transit is that these largely automated systems would have comparably lower operating costs than other modes of mass transportation. What was observed in the case of BART was a change in the *type* of operating personnel involving more engineers and more maintenance personnel,¹⁹ who are higher paid. One regional study commented, "We are informed that automated transit systems operating today in other cities do not enjoy lower labor costs or operating deficits than comparable non-automated systems."²⁰ It has been predicted that BART's operating deficit will reach a yearly \$22 million upon completion of the system.²¹

By comparison, bus systems tend to cost much less than fixed-rail mass transit.

A Harvard University economist, John Kain, estimates that the yearly *interest* cost alone of the money needed to fund Atlanta's rail system would pay for increasing bus service by 50 percent and offering that bus service *at no cost at all to riders*.²²

The Committee on Local and Urban Affairs of the 1975 Minnesota State Legislature calculated that, for the Twin Cities area, a mass transportation system with a fixed-guideway backbone and supporting bus system would incur capital costs of between \$3

¹⁸ "Another Victim of Inflation: Washington's Subway," *U. S. News and World Report*, Vol. LXXVII, No. 26 (Dec. 23, 1974), p. 43.

¹⁹ "Trouble in Mass Transit: Why Can't the People Who Put a Man on the Moon Get You Downtown?" p. 193

²⁰ Berg and Petrafeso, p. 16.

²¹ "'Last Hope' Effort for Transit: Where 12 Billions in Aid Will Go," p. 42.

²² "Para-Transit," *Consumer Reports*, Vol. 40, No. 4 (April, 1975), p. 264.

billion and \$5 billion. However, it would cost only a little over a half billion dollars to triple the size of the existing bus system.²³

A 2.5 mile busway leading into the Lincoln Tunnel in the New York metropolitan area is used by 40,000 riders in the morning rush hour - 6,000 more than the entire BART system during the AM time period.²⁴ A similarly successful bus project in California involves a freeway lane reserved for buses only. The El Monte busway was so highly acclaimed that bus lanes are scheduled to be built in Santa Monica and Hollywood.²⁵

Still another experiment with buses which proved successful occurred in Minneapolis. The Minneapolis project involved the use of exclusive bus ramps on highways and a complex network of metering devices. The program spent only \$5.9 million including the purchase and installation of computers and other electronic equipment.²⁶ The estimated cost of a rail transit system that would have provided the same service was upwards of \$200 million.²⁷

In a study of Federal Transit subsidies Professor George Hilton of UCLA concludes, "...projects to give buses priority over other vehicular traffic have been, on the whole, the most successful in the entire Urban Mass Transportation Administration program."²⁸

One DOT study summarized that buses provide an early-action

²³ Berg and Petrafeso, pp. 14-15.

²⁴ "Para-Transit," p.261.

²⁵ "'Last Hope' Effort for Transit: Where 12 Billions in Aid Will Go," p.44.

²⁶ "Para-Transit," p.261.

²⁷ Ibid.

²⁸ George Hilton, Cited in "Para-Transit," p.261 [emphasis added].

approach to improve public transportation service and have a high degree of service flexibility so that only a relatively small number of strategically located bus facilities are needed to provide regional rapid transit.²⁹ The study concludes, "*The bus can provide adequate capacity for most urban corridor demands.*"³⁰

Experts agree that upgrading highways, para-transit and other road-related facilities, can be highly successful in improving transportation in most urban areas.

As former Administrator of the Urban Mass Transportation Administration, Frank Herringer, has commented, "We are going to see more creative ways of using existing street networks, special bus lanes, [and] traffic lights...."³¹

One study, sponsored by UMTA found that improving street signal systems in some cities cut travel time on roads by up to 40 percent.³² During congested periods a 5 to 15 percent reduction in travel time could result in an 8 to 20 percent decrease in energy consumption.³³ A reduction in pollution could also result from improving street signal systems. Similarly, para-transit options such as expanding taxi service and reintroducing jitneys offer new promise for solving the urban transportation problem.³⁴

²⁹ Wilbur Smith and Associates, Sverdrup and Parcel Associated and the Stanford Research Institute, "Bus Rapid Transit Options for Densely Developed Areas," study prepared for the U. S. Department of Transportation (Washington: GPO, 1975), p.16.

³⁰ Ibid.

³¹ "Last Hope' Effort for Transit: Where 12 Billions in Aid Will Go," p.44.

³² Alan M. Voorhees & Associates, "Guidelines to Reduce Energy Consumption Through Transportation Actions," a report prepared for the Urban Mass Transportation Administration (Washington: UMTA, 1974), p.A-7.

³³ Ibid.

³⁴ "Para-Transit," *passim*.

CONCLUSION

In the past, UMTA has given much too high a priority to construction of rail transit systems, ignoring the studies sponsored by Congress, DOT, EPA and unbiased researchers in the private sector. *Consumer Reports* suggests one reason ultra-modern systems such as BART win support is the glamour and appeal of space-age technology. CU comments, "It costs little to reserve a lane for buses on an existing freeway, but the idea makes a terrible four-color brochure and a rather undramatic boast of political accomplishment."³⁵ *U. S. News and World Report* quotes an unidentified mass transportation industry official as saying, "I can't see Congress continuing to pour money into one failure after another."³⁶

Perhaps the most damning evidence against rail mass transit systems comes from the Committee on Local and Urban Affairs of the 1975 Minnesota State Legislature, which reviewed numerous urban transit studies and heard weeks of testimony before issuing its report. The Minnesota report is significant in that it is undoubtedly applicable to most other urban areas as well. The report concludes:

There are some clear conclusions to some important questions about fixed guideways. The guideways would not compete very well with the private automobile or relieve us from freeways. They would have a regressive social impact. They would not save much petroleum and would draw on increasingly scarce and expensive electrical energy. They would be extremely intrusive, both during construction and operation. They would

³⁵ "Trouble in Mass Transit" Why Can't the People Who Put a Man on the Moon Get You Downtown?"p.192

³⁶ "'Last Hope' Effort for Transit: Where 12 Billions in Aid Will Go," p.44.

not prevent sprawl in the fringe areas. They are as likely to strangle as to free downtown commercial areas and as liable to perpetuate as to prevent the decentralization and separation of residences, services, and jobs. They are not likely to reduce pollution and congestion, and may even increase them in the downtowns and neighborhood station areas. They have the potential to further disrupt and divide our community, clog our regional and local commercial centers and scatter ugly and inconvenient strip and intersection development all along their course. On this basis we conclude that the benefits of fixed guideways would be moderate, indeed would probably come too late, and might very well be outweighed by the disadvantages. Other means of public transit have a greater potential for good, a lesser potential for harm, and the promise of immediate effect.³⁷

It must be acknowledged on the basis of the existing data that rail mass transit is a practical alternative only in cities which are very densely populated and even within these urban areas, fixed-rail transportation networks should be confined to the most thickly populated regions. Certainly, no more than ten to a dozen cities would be involved. As documented in this paper, *to build rail systems where none are warranted might very well aggravate existing urban traffic congestion, energy and pollution problems.*

One DOT-sponsored study concludes, "Efficient bus rapid transit service in densely developed areas -- especially in the city center -- is essential for many reasons. These areas are where the heaviest passenger concentrations are found, where peak-hour congestion is prevalent, and where public transport ³⁸ can achieve a significant time advantage over car travel." *Consumer Reports* maintains, "... if the goal is high [passenger] capacity, rail transit is not necessarily the only, or the best,

³⁷ Berg and Petrafeso, pp. 13-14.

³⁸ "Bus Rapid Transit Options for Densely Developed Areas," p.1.

choice."³⁹ Another DOT study is even more definitive. It declares, "Based on our comparison of the full costs of rail and express bus systems, it seems difficult indeed to justify new rail systems."⁴⁰

Compared to rail transit, expansion of bus and para-transit systems are attractive alternatives. One report comments, "The price of one new subway would buy a whole range of para-transit ideas in dozens of cities. Yet cities are planning massive fixed guideway systems, leaving the field of para-transit largely unexplored."⁴¹ An article in the *Wall Street Journal* states that in the year 2000, bus systems will be, "... the fastest growing and most important forms of mass transit, according to many transportation experts..."⁴²

Bus systems need much less capital, are more flexible in scheduling and routing, offer comparative fuel economy and produce less pollution, in relation to rail transit.⁴³ Admittedly, the UMTA position on the priority of various modes of mass transit has recently showed signs of change. In January, 1975, UMTA published guidelines for the issuance of Federal grants to urban mass transit projects which encouraged heavier consideration of cost-effective transit systems.⁴⁴

³⁹ "Para-Transit," p. 261-262.

⁴⁰ J. Hayden Boyd, Norman J. Asher and Elliot S. Metzler, "Evaluation of Rail Rapid Transit and Express Bus Service in the Urban Commuter Market," a study prepared by the Institute for Defense Analysis for the U. S. Department of Transportation (Washington: GPO, 1973), p. 129.

⁴¹ "Para-Transit," p. 264.

⁴² Bill Paul, "Troubled Transit," *The Wall Street Journal*, Vol. CLXXXIV, No. 63, (Sept. 27, 1974), p. 1.

⁴³ For a comparison of the energy efficiencies of various modes of urban transportation see for example "Energy Efficiencies of Urban Passenger Transportation" and for both comparative energy efficiencies and pollution output levels see "Evaluation of Rail Rapid Transit and Express Bus Service in the Urban Commuter Market."

⁴⁴ U. S. Department of Transportation, "Capital and Operating Assistance Formula Grants: Interim Guidelines and Procedures," *Federal Register*, Vol. 40, No. 8, Part IV (Jan. 13, 1975), pp. 2534-2539.

The focus of this paper has been on mass transportation. It is important, however, to understand that the automobile will still be the dominant form of transportation at least until the year 2000.⁴⁵ According to Stanford Research Institute physicist Howard Coffee, "The economics of mass transit have not yet been addressed adequately. The automobile will be with us for quite some time."⁴⁶

To operate bus systems, automobiles, and many forms of para-transit, it is necessary to construct and maintain a safe and efficient network of roads and highways.

⁴⁵ Paul, p.1.

⁴⁶ Ibid.

Senator RANDOLPH. We will continue with the statements. Mr. de Lorenzi, Mr. Johnson, Mr. Arrow, and Mr. Koltnow?

STATEMENTS OF JOHN DE LORENZI, MANAGING DIRECTOR, PUBLIC POLICY DIVISION, AMERICAN AUTOMOBILE ASSOCIATION; E. M. JOHNSON, PRESIDENT, THE ASPHALT INSTITUTE; LEONARD ARROW, DIRECTOR, HIGHWAY ACTION COALITION, AND PETER G. KOLTNOW, PRESIDENT, HIGHWAY USERS FEDERATION

Senator RANDOLPH. Mr. de Lorenzi?

Mr. DE LORENZI. Yes, sir.

Mr. Chairman, I am John de Lorenzi, managing director of the public policy division of the triple A, American Automobile Association. For identification purposes for the record I have brought with me Chuck Brady, director of the triple A highway department and James Guidinas, assistant director of the highway department for the triple A.

We again welcome the opportunity to appear before this subcommittee concerning the future course of highway transportation in the United States. AAA has a strong interest and concern in the highway legislation that is to be recommended by this committee. Our almost 17 million members comprise 18 percent of all licensed drivers operating some 21 percent of all passenger cars registered in private use.

As such, AAA members constitute one of the largest organized groups of direct beneficiaries of our highway program with a vital stake in the direction which any future highway program may take. They also pay in billions of dollars in taxes annually to build and maintain our highways.

FEDERAL ROLE

AAA supports the principle of Federal aid to the States in the construction of highways having national importance. The National System of Interstate and Defense Highways constitutes such a highway system and should be completed at the earliest practical date.

To do this, an authorization of not less than \$4 billion per year should be provided through its completion. As important as the Interstate System is, it is likely to carry only about 20 percent of the daily traffic. The other 80 percent will be carried on the principal arterial network, collector roads and local roads and streets. Because the principal arterial network in both rural and urban areas constitute the major arteries of commerce and communication, AAA believes that network ought to qualify for Federal aid out of the highway trust fund.

Since 1956, the highway trust fund has been burdened with the expense of many transportation activities far beyond those envisioned when the trust fund was established. AAA believes that the trust fund should be used only for the construction and improvement of the Interstate System and the urban and rural primary arterial network.

State governments should be responsible for roads of statewide significance while counties and cities should be responsible for the remaining roads and streets. Limitation of the trust fund to supporting the Federal share of the cost of acquisition of rights-of-way and

construction of the Interstate System as well as urban and rural principal arterials represents a long held position of AAA as modified by the delegates in the 1974 annual meeting—reference A-2(b).

The modification consisted of reference to principal arterial highways in recognition of functional, rather than administrative classification of highways and in support of our basic conviction—reference A-2(a)—that highway trust fund financing should place major emphasis on improvement of those highways of the highest national significance.

Also in 1974, the delegates approved resolution RA-15 which extends the use of trust funds to "updating" the Interstate System and calls for a halt in trust fund expenditures for the broad array of transportation activities authorized in the Federal-Aid Highway Act of 1973.

The large number of specifically authorized programs now in existence unnecessarily impedes the State highway departments and bogs them down with unnecessary redtape. AAA favors the consolidation and reduction in the number of Federal-aid grant programs, which I think ran around 34.

AAA also favors continuation of the highway trust fund with no change in the taxes now supporting it. The recently announced administration proposal to divert 2 cents of the 4 cents Federal gasoline tax to the general fund is unwise and unacceptable. In our judgment, it would leave the Federal highway program badly underfunded. AAA believes that if taxes now deposited in the trust fund are not going to be used for highway construction and improvement then they should be repealed.

The policy that all highway trust fund revenues should be expended for highway purposes only has been a AAA policy for many years. It is reviewed at each annual meeting and each year the delegates have reaffirmed this position—reference Policy A-5(a).

We do believe that the administration is right in attempting to channel such interstate funds as are available to accelerate the completion of dangerous gaps in Interstate System routes. Such gaps in the system present a serious safety hazard and cause considerable inconvenience. By some mechanism, the Department of Transportation should be in a position to make the Federal share of the cost of closing these gaps available to the States just as rapidly as the States are in a position to undertake the job.

Previous Federal legislation established a timetable under which the States had to declare whether or not they intended to complete designated segments of the Interstate System, States were given until July 1, 1975, to submit a schedule for the completion of those segments which they intended to complete.

While we can appreciate that changing conditions may dictate changes in State priorities for completion of various segments of the Interstate System, States have had almost 20 years to make a final decision on whether to build and when to complete. We hope that the Congress will resist further efforts to postpone such decisions and require that States and their local jurisdictions live up to their responsibilities inherent in their declarations.

The sooner such decisions are made, the sooner the Congress will be able to come to grips with the question of balancing available funds with needed improvements.

BRIDGE REPLACEMENT PROGRAM

Section 204 of the Federal-Aid Highway Act of 1970 established a special bridge replacement program and authorized \$250 million for carrying out this activity in fiscal year 1972 and 1973.

The Federal-Aid Highway Act of 1973 authorized an additional appropriation of \$175 million total for the 3-year period fiscal year 1974-76. Total authorizations already therefore amount to \$425 million.

The fourth annual report to Congress on the special bridge replacement program submitted in December 1974 reveals that 32,420 out of a total of 230,000 bridges on the Federal-aid system, as inventoried by the States, are either structurally deficient or functionally obsolete. Of the 7,016 bridges listed as structurally deficient, 3,482 are reported to be restricted to passenger cars only. Some 25,404 bridges were listed as functionally obsolete bridges identified as those bridges whose deck geometry, clearances, and approach roadway alignment can no longer safely service the system of which they are integrated parts.

About one bridge in eight on our Federal-aid system is, therefore, unable to safely serve the road system of which it is an integral segment.

In fact, the report points out that 31,000 of the deficient bridges have safe load limit capacities less than the system of which they are a part and require load-limit posting; 300 of these bridges are closed to all traffic.

The cost of upgrading these 32,420 deficient bridges has been conservatively estimated at \$10.4 billion. The report indicates that there is another group of 45,720 bridges that is rapidly becoming functionally obsolete. No estimate was made of the cost of their eventual replacement. However, it seems entirely probable that at least another \$10 billion must be planned for that task.

Faced with a \$20 billion investment need, the average of \$85 million per year authorized for the 5-year period fiscal years 1972-76 would stretch out this program over 200 years. While we have no specific figure to recommend, the magnitude of the need would seem to indicate that future authorizations for this program should be in the range of between \$500 million and \$1 billion per year.

We have attached to this copies of our policies and resolutions that I referred to in the text. That concludes our statement, Mr. Chairman.

[The attachments referred to follow:]

GROUP A

HIGHWAYS AND MOTORIST TAXATION

A-1. STREET AND HIGHWAY PROGRAMS

(a) AAA Emphasis on Modern Street and Highway Program

A modern toll-free highway system, properly designed to serve existing and prospective future highway traffic needs, is of the utmost importance to our expanding economy and to national and civil defense.

(b) Highway Functions Assigned to Proper Levels of Government

Basic to providing needed highways, roads, and streets is the recognition of an exceedingly important principle of government. Government at the different levels—municipal, county, state, and Federal—all have their appropriate responsibilities. Local affairs should be handled by local government. Broadened scope makes other measures properly the responsibility of the state, while the Federal Government properly should deal with matters of national significance. Hence, as to participation, the Federal Government should concern itself solely with roads of national significance in rural and urban areas. State government should give major emphasis to roads of state-wide significance, while counties and cities should be responsible for the remaining roads and streets. Regardless of any Highway Trust Fund allocations for highways, the control of planning, design, construction, and maintenance of their roads and streets should remain with state and local governments.

(c) Tax Protection for Motor Car Owners—Of the utmost importance is the fact that the passenger car owner is by far the most over-taxed user of the highways and should not be forced to bear tax burdens that are discriminatory.

A-2. HIGHWAY TRUST FUND FINANCING OF HIGHWAYS

(a) Support for Highway Trust Fund Financing—The American Automobile Association supports the principle of Federal Highway Trust Fund assistance to the states for their highway building programs.

Major emphasis must be placed on the improvement of those highways of the highest national significance, particularly in metropolitan areas. Such highways should include, but need not be limited to, the National System of Interstate and Defense Highways which should be the backbone of our highway system. All such highways should constitute an integrated system clearly defined and strictly limited as to mileage.

Highways selected for major emphasis should provide the highest levels of traffic service, should be functionally classified as principal arterials, and should be subject to control of access.

The AAA is opposed to Highway Trust Funds being expended on local service roads in rural and urban areas.

(b) Federal Share of Costs — Except for the traditional formula for public land states, Highway Trust Funds should be made available only for facilities on Federally approved systems in the following percentages: Interstate System—90 percent; principal arterials in rural areas—70 percent; freeways, expressways and other principal arterials in urban areas—70 percent.

Highway Trust Funds provided to all the above systems should be made available to pay the costs of rights-of-way and construction but should not be made available for maintenance expenses.

A-5. USE OF HIGHWAY TRUST FUNDS

(a) Trust Funds for Highway Purposes—Federal Highway Trust Fund revenues should be expended for highway purposes only.

(b) Utilities — Neither Highway Trust Funds nor state highway user funds should be used for repayment of the cost of relocating utilities on public highway rights-of-way, whether such utilities are privately or publicly owned. Where private or public utilities are permitted to occupy highway rights-of-way, an agreement should be signed as a condition of their occupancy that any future relocation of utilities occasioned by changing highway needs will not be at the expense of highway funds.

RA-15. FEDERAL PARTICIPATION IN HIGHWAY PROGRAM DEVELOPMENT

The Federal-Aid Highway Act of 1973 has significantly extended the liability of the Highway Trust Fund for a broad array of transportation activities far beyond that envisioned when the Trust Fund was established. The American Automobile Association calls for a halt in expenditures for such programs.

The American Automobile Association also calls for restrictions in the areas of Federal responsibility in state and local highway programs to the completion and updating of the Interstate System and the improvement of Federal-aid urban and rural principal arterials.

The American Automobile Association supports only those Federal highway user taxes which are used for these intended Highway Trust Fund programs.

Senator RANDOLPH. Thank you, Mr. de Lorenzi. Mr. Johnson?

STATEMENT OF E. M. JOHNSON, PRESIDENT, THE ASPHALT INSTITUTE

Mr. JOHNSON. Thank you, Senator Randolph, gentlemen.

My name is Eugene M. Johnson, I am president of the Asphalt Institute. But I speak today for the American Road Builders Association. I would like to add my comments in the interest of brevity, Mr. Chairman, but I would request, please, that the written statement plus the burgundy covered booklet dated July 1975 setting forth ARBA's 1975 legislative proposal be made part of the record.

[The statement referred to appears at p. 1298, the booklet, accompanying the testimony of James Nelson, president, American Road Builders Association, may be found at p. 1595.]

Mr. JOHNSON. In the early days the emphasis on roads was primarily for delivering the mail. The Postal Service was constitutionally made a Federal responsibility in that the Constitution states that the Federal Government shall establish post offices and post roads. Post roads are still a concern, but we are not suggesting that all roads over which mail is carried be part of a Federal aid system.

At the same time, roads are central to many other basic services. The Constitution also states that Congress is to regulate commerce among the several States. In a sense, I suppose, we could assert that all highway transportation is interstate commerce inasmuch as the vehicles used on them or the fuel for them is probably moved across State lines.

The highways, roads and streets in this country have developed from primitive trails and have gradually been made into a system of roads to meet needs as they develop.

Of the 3.8 million miles, 2.8 million, which is about 74 percent of all the roads and streets in this country are under local jurisdiction; 792,000 miles, or about 20 percent are under State jurisdiction. The remaining 6 percent is under Federal jurisdiction in the national parks and so forth.

915,000 miles, or about 24 percent of the total mileage in the United States, are under State and local jurisdiction, some of each, but all on the Federal aid system.

There are 700 miles on the Federal aid primary system today and 25,000 miles on the Federal aid secondary system today that are still dirt or gravel surfaced.

We feel that the Federal aid should be restricted for construction and reconstruction and not used for maintenance. The ARBA strongly takes the position that Federal aid should not be made available for maintenance purposes and strongly supports continuance of this policy.

The existing Federal role in highways has functioned quite well for nearly 50 years now.

I think we all agree that there is too much redtape. Nevertheless, the Federal-State partnership that has existed with the Federal Highway Administration and its predecessors is and has been a model for Federal-State relationships.

Certainly the State highway and transportation departments do not always agree about the Federal Highway Administration. Partners do not always agree, but the job has been done and in my opinion has been done well.

The Federal Highway Trust Fund finances the Federal share. ARBA strongly believes that this is a sound and logical way to finance the program.

Financial and jurisdictional arrangements have evolved to meet needs as they develop and these needs are constantly changing.

I might mention just a few that you might say are a little more recent vintage.

We need to conserve energy. We need to reduce the unit cost of transportation because transportation cost is involved in practically everything that we use. We need to revitalize the cities in this country. We need to decentralize the population and industry.

We need to encourage industrial activity and increase employment.

We need to reduce highway accidents and deaths on highways.

These are just a few of the needs I am sure we could all name many more. The Federal-aid Interstate System is the most economical per unit of use. It saves time, it saves fuel, it is safer.

The accident rate and the fatalities on the Interstate System are far below the rates on other highway and street systems.

At this point I would like to state as an ARBA recommendation that the future interstate authorizations be at the level of \$5 billion a year. This should include \$500 million to be allocated at the discretion of the Secretary of Transportation directly to those States that are in a position to complete their portions of the Interstate System.

The Federal interest should focus on transportation problems that State and local jurisdictions cannot solve by themselves. The Interstate System would be a good example of that position.

The use of non-interstate highways across the country is limited to a serious degree by inadequate and deficient bridges. The ARBA recommends a substantial increase in the Federal-aid funding for the special bridge replacement program.

We need a continued, strong Federal effort to assist in modernizing the primary and secondary system. We need to concentrate on a designated system to be built to uniform standards with sufficient flexibility to meet any special local conditions.

ARBA recommends continuation of an adequately funded rural highway improvement program. Continued opportunity should be afforded for county governments to work within the Federal-aid framework.

Federal assistance should be provided for the reconstruction of bridges and bridge approaches on roads not located on any Federal-aid system.

ARBA supports linking special user taxes with specific programs directly benefiting users.

The Highway Trust Fund has been and is a dependable and equitable funding mechanism.

ARBA recommends an indefinite extension of the Highway Trust Fund beyond the current expiration date of October 1, 1977, with all current taxes extended at their present level.

The tax rates for the highway trust fund were recognized when they were established as being equitable, and the gas tax was recognized as the major source of revenue for the States for road and street purposes.

In 1956, when the Interstate System was started, the average gasoline tax was 5.54 cents per gallon in all of the States. The average now is 8 cents per gallon.

The program stability that the highway trust fund initially afforded has actually been thwarted by the impoundment process. ARBA's conclusion is that the impoundment of Federal aid highway funds should be ended forever.

If I may, Senator Randolph, I would like to express our appreciation and compliment you and the Senate for getting all of the impounded funds released last April.

I think that the record made after the release of \$2 billion in February and the remainder of the impounded funds in April, as of the end of the fiscal year last month indicates what could be done.

Senator RANDOLPH. Mr. Johnson, you are saying that following our action the allocations to the respective States moved at once. Is that right?

Mr. JOHNSON. They did, sir.

Senator RANDOLPH. And that contracts are now being consummated?

Mr. JOHNSON. Yes, sir.

Senator RANDOLPH. And actual construction is in place and people are being given gainful employment.

Mr. JOHNSON. Construction is underway. That does offer jobs. Yes, sir.

Mr. Chairman, we appreciate the opportunity to present these views very briefly. We appreciate your hearing us and our position on these matters.

[Mr. Johnson's statement follows:]

AMERICAN ROAD BUILDERS' ASSOCIATION

ARBA Building

• 525 School Street, S.W.

Washington, D.C. 20024



1975 Highway Legislative Proposals

Presented by the

American Road Builders' Association

to the

United States Senate

Committee on Public Works

Subcommittee on Transportation

Thursday, July 24, 1975

Presented by: E.M. Johnson,
President
The Asphalt Institute
College Park, Maryland,
and
Chairman, ARBA Highways
Advisory Council

Mr. Chairman and Members of the Subcommittee on Transportation:

My name is E.M. Johnson. I am the President of The Asphalt Institute, College Park, Maryland, and I am here today in my capacity as Chairman of the Highways Advisory Council of the American Road Builders' Association.

In my statement today, I will refer to some ARBA legislative recommendations which are set out in a printed booklet accompanying this statement. In the interest of conserving time, I will not read these recommendations in full, but I ask that they be made a part of the record.

We are pleased to have this opportunity to discuss the Federal role in transportation and, more particularly, the Federal role in highway transportation. This appears to us to be a most important discussion and one that could be applied beneficially to all Federal programs. It sometimes appears that citizens expect the Federal government to be all things to all men. Aside from the immense difficulty of assuming any such responsibility, the prospect that the Federal government should be "into everything", is an idea foreign to our Federal-State-local system of government.

In the early days when personal mobility was essentially a privilege reserved for the well-to-do, much emphasis was placed on the importance of maintaining a system of roads adequate for the carriage of mail. The postal service is Constitutionally a Federal responsibility. Article I, Section 8, of the Constitution gives Congress the power to "establish post-offices and post-roads," reflecting an understanding that both are necessary for a functional postal service.

This concern with the needs of the postal service is still reflected in present highway laws. The apportionments for the rural primary and rural secondary systems are based, in part, on the mileage of rural delivery routes and inter-city mail routes served by highway vehicles.

We do not suggest that the cost of the highway program be charged to the U.S. Postal Service. The Federal Government should not assume the responsibility for every road and street on which the mail is carried. As we take this philosophical look at the Federal role in transportation, however, it is important to note that roads are essential to many basic services, of which the transportation of mail is just one.

Congress is also empowered "to regulate commerce among the several States." This is a Constitutional provision which has been used to justify Federal legislation in many fields where it can be shown that interstate commerce is a factor. Using the interstate commerce clause as our justification, we could assert that all highway transportation involves interstate commerce. In practically every case, either the vehicle or the fuel that powers the vehicle has been transported across State lines. There is considerable precedent for such an interpretation of the interstate commerce clause.

What we have today, in fact, is a road system that began with Indian trails, pioneer roads and village streets. This system has grown as the nation has grown, responding to the changing needs. The financial and jurisdictional responsibilities, likewise, have come about as a reflection of recognized needs.

Of the 3.8 million miles of roads and streets in the United States, 2.8 million miles, or about 74 percent, are under the control of local units of government. Another 792,000 miles -- or about 20 percent of the whole system -- are under State jurisdiction. The remaining 6 percent -- in national parks, national forests, and other public lands -- are in the Federal domain.

Of the roads under State and local jurisdiction, about 24 percent, or 915,000 miles, are on the Federal-aid systems and thus eligible for Federal construction assistance. This does not mean that they all regularly receive such assistance. At last count, there were 700 miles on the Federal-aid rural primary system and 25,000 miles on the Federal-aid secondary system which are still dirt or gravel roads.

Federal assistance is available only for construction and reconstruction. Federal-aid is not made available for maintenance purposes and ARBA strongly supports the continuance of this policy.

The question is what should be done to change the Federal role in highway transportation? This leads to another question, or rather set of questions. For what purpose should the Federal role be changed? To provide better highways? To distribute funds more equitably? To relieve State and local communities of financial burdens? Or what?

Our first observation is that the existing system has worked reasonably well for more than 50 years. There is obviously far too much red tape in the Federal program. Nevertheless, the Federal-aid highway program stands as virtually a model of a working Federal-State partnership. As is the case in any dynamic partnership, the partners do not always agree. However, they have gotten the job done, generally speaking, in a way that is satisfactory to both sides.

The Federal Highway Trust Fund finances the Federal share of the program through taxes on highway users. ARBA strongly believes that this is a sound and logical way to finance this program.

As I have already mentioned, the financial and jurisdictional arrangements for the highway program came about gradually in response to recognized needs. Our needs are constantly changing. At this point, let me list a few emerging needs, which are closely related to the highway program:

1. A recognized national need to conserve energy, particularly energy derived from petroleum. About 18 percent of the total energy consumption in the United States is accountable to motor vehicle transportation.

2. Closely related to the energy problem, a need to hold down or, if possible reduce, the unit cost of transportation. Transportation costs are a hidden item in the cost of everything we buy. Agricultural goods must be moved from the farm to the processor and then to the common marketplace. Some portion of the consumer's electric bill covers the cost of moving fuel from the mine or wellhead to the generating plant. The list could be extended indefinitely.

3. A need to revitalize our cities which, almost without exception, have suffered greatly from decay.

4. A need to decentralize population and industry, rebuilding economic growth centers in areas where the economy is lagging.

5. A need to encourage industrial productivity and an expanding employment base throughout America.

6. A need to reduce the toll of highway accidents and deaths.

This is not intended to be a comprehensive list of all of our national needs. I have only emphasized emerging needs, or newly recognized needs, which might lead us to recommend some changes in the basic structure of the Federal-aid highway program.

When we launched upon the Interstate program in 1956, we perceived the Interstate System as the first building block in the modernization of the national highway system. A mile of Interstate highway costs much more than a mile of highway built to lower standards. However, when the cost of the highway is divided by the vehicle miles of traffic it carries, the Interstate highway is the most economical system, per unit of use. Furthermore, the Interstate offers important consumer benefits in terms of time savings and fuel economy. It is also highly significant in terms of accident reduction.

This subject is discussed on page 5 of our booklet under the heading, "Completion of the Interstate System Now!"

CONCLUSION: ARBA recommends future Interstate authorizations at the level of \$5 billion per year. This should include \$500 million to be allocated at the discretion of the Secretary of Transportation directly to those states that are in a position to complete their systems.

The Federal interest should focus on transportation problems which the State and local governments cannot solve by themselves. In this regard, the Interstate System is an excellent example.

The usefulness of the non-Interstate roads is seriously limited by gross inadequacies in highway bridges throughout the United States. This is another area where a strong Federal effort is needed in order to improve mobility, reduce transportation costs and save lives.

This subject is discussed on page 9 of our booklet under the heading, "Accelerated Bridge Replacement Program."

CONCLUSION: ARBA recommends a substantial increase in the Federal-Aid funding for the special bridge replacement program.

We believe that a continued strong Federal effort is needed to assist in the modernization of the Federal-aid rural primary and secondary roads. Federal aid should be concentrated on a designated system of roads built to uniform standards, with reasonable flexibility to accommodate special local conditions. The needs of the designated systems are great.

Our discussion of this subject, headed "Increased Rural Transportation Needs," is found on page 2 of our booklet.

CONCLUSION: ARBA recommends continuation of an adequately funded rural highway improvement program. Continued opportunities should be afforded for county governments to work within the Federal-aid framework. Federal assistance should be provided for the reconstruction of bridges and bridge approaches on roads not located on any Federal-aid system.

ARBA strongly supports the principle of linking special user taxes with specific programs from which the users directly benefit. For the highway program, the Highway Trust Fund provides the element of dependable funding, and does so in an equitable manner.

Our discussion of this subject, headed "Extension of the Federal Highway Trust Fund," is found on page 1 of our booklet.

CONCLUSION: ARBA recommends an indefinite extension of the Highway Trust Fund beyond the current expiration date of October 1, 1977, with all current taxes extended at their present levels.

The taxes supporting the Highway Trust Fund were set at rates designed to be equitable to the various classes of highway users. Taxes levied by the States were taken into consideration. It was recognized that the State gasoline tax is the principal source of State highway revenue, and that the Federal gasoline tax therefore should not be set so high as to preempt this State revenue source.

As shown in the table attached to this statement, the average State gasoline tax has increased from 5.54¢ per gallon in 1956 to 8.00¢ at present. It appears that further gasoline tax increases will be needed in most States in order to maintain adequate highway programs. If Federal tax rates are held at the existing level, the result will be that States will assume a higher proportion of the highway financing responsibility.

Program stability -- one of the primary objectives of the Highway Trust Fund -- is thwarted by the impoundment of funds authorized by Congress. Impoundment is still a major threat.

Our discussion of this subject is found on page 3 of our booklet under the heading, "End of Impoundment of Funds."

CONCLUSION: The impoundment of Federal-aid highway funds should be ended forever.

Mr. Chairman, we appreciate this opportunity to present the views of the American Road Builders' Association on this most important subject.

STATE AND FEDERAL GASOLINE TAX LEVELS, 1956, 1959, 1975

	1956 (3¢ Federal)	1959 (4¢ Federal)	1975 (4¢ Federal)
-- Number of States at each tax level --			
	(1)		
None	2		
3¢	1	1	
4¢	4		
5¢	12	11	1
5.5¢	1	1	
6¢	17	20	1
6.5¢	4	5	1
7¢	10	13	12
7.5¢			2
7.75¢			1 ⁽²⁾
8¢			12
8.5¢			6
9¢			13
10¢			2
Average	5.54¢	6.02¢	8.00¢

(1) Alaska and Hawaii, before statehood.

(2) Montana's tax of 7.75¢, effective July 1, 1975, is subject to being increased by as much as 1.5¢ by the governor if he finds additional revenue is needed to match Federal-aid funds.

Senator RANDOLPH. Mr. Arrow?

STATEMENT OF LEONARD ARROW, DIRECTOR, HIGHWAY ACTION COALITION

Mr. ARROW. Mr. Chairman and members of the committee.

I am Leonard Arrow, Director of the highway action coalition. The coalition is an amalgam of national environmental groups in addition to 500 more local citizens' groups all of whom got together because we share a common concern about the nature of the transportation program in the country today.

We appreciate this opportunity to present our views to the committee.

I would like at this time to submit my testimony for the record and proceed to summarize it.

Senator RANDOLPH. Yes. Your testimony will be included.

[The statement appears at p. 1309.]

Mr. ARROW. It seems to us that one of the major things that the committee must do this year is to examine the Federal role in transportation in an attempt to determine precisely what it is that the Federal Government ought to be doing to develop its transportation system and to also set forth the manner in which it should go about doing this.

The reason we believe that this is the case is because there is at the current time in the United States a significant amount of transportation problems, both within and without the highway program.

We have a situation where both the airline corporations and railroads are in severe financial distress. We have a situation where we have built over the last 20 years a highway system which doesn't really seem to be really satisfying the two basic and separate needs of that system, to serve the rural people adequately in the manner that they need to be served, and to serve urban areas adequately in a manner which is different from the need of rural people.

We don't believe that the same type of program can apply equally to both people. The nature of transportation is such that you cannot take what is a solution to an urban problem and have it work so successfully in a rural community.

Of these things there evolves what seems to be a basic dilemma over the Federal role in transportation. On the one hand it is recognized that because no two geographical areas are alike in their transportation needs or can be alike as far as problem solving is concerned, that the Government closest to the problem needs to be the one that makes the decisions on how to solve it.

Transportation planners who have dealt over the years with urban communities, who know how to move people and goods in urban communities, cannot be simply uprooted and attempted to apply the same principles of urban transportation to rural areas.

On the other hand, the evolution of the energy crisis, our problems with air pollution and some problems we are having with land use development, what the basic agricultural land of the country is being used for have accelerated of late and we find that in discussions over energy, in discussions over agriculture, and in discussions about land use planning and air pollution, that transportation, how our trans-

portation, how our transportation system operates has become a very basic concern of people that are trying to solve those problems as well.

This committee is working on the Clean Air Act. It is very well aware of the problems in urban areas regarding the automobile.

The Agriculture Committee is very much aware of the problems in grain shipments that we are having with the railroads being in the shape they are and the necessity for the Corps of Engineers to do some type of revitalization work on the inland waterways it has built.

But these does not seem to be any coordination on the Federal branch as to how solving a problem of one mode is going to affect the operation of another.

We have built an enormous Interstate Highway System without really looking at what it would do to our railroad system.

We have built an enormous system of airports without determining how that in turn would affect passenger movement long distance on highways and long distance on rails.

So we are faced with a situation where we are aware that in some cases the local governments are the ones that should be making the decisions and in other cases the Federal Government simply by the nature of the impact that transportation has on all aspects of our society, economic, environmental, and energy, that the Federal Government is going to have to take a very close look at what it is the States and local areas are doing.

We don't think that this can be solved by an either/or situation. We think there has to be a mix between what the Federal Government should say to local communities regarding how they develop their transportation system, but at the same time the local communities to have sufficient flexibility so that the transportation system can reflect what their local needs are.

We suggest that the proper way in which this mix be split up is for the Federal Government to set forth what the goals of a transportation system should be, and then give to the local communities the necessary flexibility for them to solve their transportation problems within the confines of the goals.

This approach is very similar to the one that the Senate and this committee evolved in attempting to deal with the pollution as a result of automobiles.

We did not say to the automobile manufacturers you must design this type of engine or that type of engine. Rather, we attempted to give them a goal and said you fellows can decide how you want to meet this goal, but we are setting the goal.

We think it is appropriate to look at transportation in the same manner.

Given this we think there are four basic things that need to be looked at in the highway program. The first one is financing.

We don't believe that the highway trust fund is a useful device for financing transportation anymore. There are two basic reasons for this. First of all, since its inception in 1956, there has been a growing realization that both the cost and benefits of transportation are economically indivisible. You cannot provide an interstate system of highways which benefits only the people that use it because the benefits go throughout the society.

If the Interstate Highway System is the most efficient method of moving people and goods, the cost of transportation for everybody is diminished. The benefits are the same to everybody who uses it.

Similarly, the side effects, the costs involved in constructing it do not solely derive from the gasoline taxes that go into it. There are costs which are intangible, in which you cannot put a cents per gallon tax on, that are, nevertheless, costs to the society.

The only rationale, really, for the trust fund, is one that says that we think that it is such a priority that the Interstate System remain to be funded with the trust fund that we want to set it aside from the normal budgetary process.

But since the Federal Government began impounding moneys and now that the impoundment process has in a sense been constitutionalized by providing Congress a role in determining whether or not the executive can or should not withhold funds, there are very much overall restraints in a given fiscal year that can be placed on the highway trust fund which is the normal business of commerce to do so.

The administration proposed impoundments, the Congress said no, you cannot do it unilaterally. If the Congress had said yes, we agree that this is the proper time to hold down that level of spending, then you would be placing restraints on the trust fund.

Since there is no way to divide the costs up, there is no way to divide the benefits up, and there is really requirement of a joint action to agree, to hold down authorized funds, whether or not the trust fund exists, we don't see any real reason for keeping it as a separate mechanism of the highway program.

The second area that we feel that there is great need is to change the manner in which transportation planning currently goes on both by State and local communities.

The only way one can coordinate what facilities it wants to build and to look at transportation as a whole for its total impact on its community and the total goal it is supposed to serve, you have to have multimodal coordinated transportation planning.

Since 1962, it has existed for the urban areas, we suggest time is appropriate to expand this planning role to State governments as well. The benefits of planning a system and making sure that one sticks to that plan or that it allows people interested in determining, including elected representatives on both the State and Federal levels, what it is our transportation system is going to do in the future so that money can be appropriated adequately, is to be able to look at the whole system and you can't look at the whole system if there is no plan that says what you intend to do.

A third problem that we see is in the nature of the way that the programs are set up at the current time. We would agree, I think both the AAA and ours that there are too many separate categories.

Having all of these separate categories doesn't really accomplish everything. There are categories that have been set up to answer what are perceived to be specific needs. We suggest it is more appropriate to meet these needs by establishing a policy that says this is a priority and when you get your money, the programs you will submit to the Federal Government as to how you are going to spend the money shall reflect that priority.

If it is a priority of the Federal Government that rural areas should begin the extensive reconstruction of both unsafe roads and its bridges, it should state that when the States implement this program, priorities should be given to doing just that task.

Similarly, we believe that the trend toward integration of the uses to which Federal, rural, and urban funds can be extended beyond that which was contained in the 1973 Federal Highway Act.

We agree with the administration's position that the rural areas must begin to look at some feasible alternatives that exist in terms of public transportation for their communities.

We are not suggesting here that what is typically thought of as public mass transportation, the kind of thing that is being built in Washington, the kind of thing you can use in a city of 150,000 is necessarily that answer.

On the other hand, we believe that not allowing the localities who are recipients of that money to attempt to solve the problem in a manner other than what has been historically the way to do it is an appropriate method of doing so. We are particularly struck by the number of rural, the number of Representatives in Congress who represent basic rural constituencies have said during recent energy debates, particularly over in the House side, we can't raise the price of gasoline because our people in rural communities have no alternative to using the automobile.

We suggest that the time has come to look for such alternatives because in the long run, we feel that the energy crisis will dictate that such alternatives be put into place.

Finally, one area that we think needs looking at is the question of intergovernmental relations amongst the various partners in the highway program.

As I said earlier, the Federal role is being misapplied. It has to go toward establishing goals and assuring that the people who implement the program are working to meet those goals. We feel that the State must be responsible on a multimodal basis for all transportation within that State, not separate agencies to achieve the same basic end.

Thirdly, we believe that urban areas have long in the past demonstrated the capability to take care of their own problems. We think that the provisions that currently only provide for passthrough of urban funds to urban areas of over \$200,000 ought to be—I am sorry. I got that backward. The funds that are now only earmarked should be passed through.

The cities of this country for a long time had to rely on themselves and money from the State governments in order to implement the mass transit system they had going.

They have shown they can implement and maintain highway programs. We think that Federal money is no different from State money in that regard, and that they ought to be able to be given the chance to make their own decisions.

That concludes my statement.

Senator RANDOLPH. Thank you very much, Mr. Arrow.

You may know that I referred to you this morning. Were you here or someone for you?

Mr. ARROW. No, I was not.

[Mr. Arrow's prepared statement follows:]

Statement of

LEONARD ARROW
Director
Highway Action Coalition

Concerning
THE FEDERAL ROLE IN TRANSPORTATION

Before the
Subcommittee on Transportation
Senate Public Works Committee
July 24, 1975

Mr. Chairman and Members of the Committee:

I am Leonard Arrow, Director of the Highway Action Coalition. The Coalition is an amalgam of national environmental groups and local citizen groups all concerned with Federal transportation policy and its impact upon our society. We appreciate this opportunity to testify before you today.

The subject of today's hearings, The Federal Role in Transportation, even when placed within the context of the Federal-Aid Highway program, is one which has neither a definable scope nor an easy solution to the myriad problems it seeks to address. Yet we are pleased that the Committee is dealing with this question for we believe the United States has reached a critical juncture in the historical path of its transportation development.

During its history, the U.S. has constructed, and now operates one of the world's most complex transportation systems. Today, however, we find that several critical parts of our transportation system are malfunctioning. Urban commuters complain of congested highways and inadequate public mass transit; rural communities complain of unsafe roads, shortages of railroad grain cars, and nonexistent public transit; our airlines are financially distressed and a huge bloc of our railroad system is bankrupt.

One finds several common themes while looking through the broad range of solutions, before this and other Committees of Congress, for solving our various transportation problems. First among these is that there is no coordinated Federal approach to transportation development;

second, the Federal government is making decisions in areas of transportation it ought not to be involved in; and third, the impact of transportation upon the economic, environmental and energy conservation policies of the country is so extensive as to bring transportation policy directly into the debate on those issues.

These three themes, echoed by an uncommonly broad range of organized interests, serve to illustrate what we believe to be the basic dilemma this committee confronts in attempting to determine the appropriate Federal role in the highway program -- the paradox between two basic realities of transportation.

On the one hand, it is generally recognized that no two geographic areas have the same transportation needs. The type of transportation system a given community or geographic region selects is, after all, a basic developmental decision. For example, the lack of a navigable waterway may preclude a community from economically producing bulk commodities or requiring that it develop a substitute transport mode. Similarly, a community wishing to broaden its manufacturing base must assure prospective entrants that transportation facilities are available at competitive costs.

Furthermore, even where communities have the same developmental needs, what is a successful transportation solution in one community may not be in another. Topographical constraints, unique climates, population distributions and existing economic forces all combine in different mixes, thus precluding certain types of transportation development. Given this wide diversity of needs and the inability of implementing uniform solutions to problems it is both inadvisable and impractical for the Federal government to dictate to any community the composition of its transportation system.

On the other hand, it is a basic fact that the type of transportation system a nation develops has an enormous impact on its economic, environmental and energy goals. In the United States one need not look far for examples of the impact of our transportation system. In a time of energy shortages,

we find that transportation is the largest single end use of energy consumption in the country. Twenty-five percent of our total energy use is for transportation, with forty percent of that going into automobile gasoline tanks. Many of our nation's cities suffer from serious health hazards generated in part from the pollutants produced by the internal combustion engines of our automobiles. Our economy is suffering from a debilitating inflation, an inflation aided by the grossly inefficient operating characteristics of segments of regulated transportation. Given this broad and deep impact transportation has on our society it is both necessary and desirable for the Federal government to be actively involved in the development of our transportation system.

The paradox lies in the need for both local communities and the Federal government to be making transportation decisions. This is the paradox with which the Committee must come to terms.

Unfortunately, the most common manner of approaching the solution to this paradox is to view it as an either/or situation, i.e., deciding whether the benefits of local control outweigh the benefits of federal interest, and implementing a policy which presumes the superiority of one over the other. It is, however, our belief that there is another approach to resolving the paradox, one which recognizes both the necessity of local control over transportation decisionmaking and the need for a significant amount of Federal oversight over the use to which transportation monies are put.

In essence, our idea of the Federal role is one of implementing a transportation policy which does not dictate to communities what they should do, but rather precludes them from developing transportation in a manner detrimental to other national policies. We believe that states and local governments must prove to the Federal government that what they plan to do will not adversely impact other Federal and state programs. We believe that this policy would allow the Federal government to insure that our transportation system is developed in line with national policies while still allowing local and state governments the flexibility to make transportation decisions consistent with locally determined needs and desires.

I should make clear at this point that the Highway Action Coalition believes that a transportation system cannot be viewed through its modal components. Unlike the laws of physics and mathematics, a transportation system neither equals the sum of its parts nor does every action have an equal and opposite reaction on it. In transportation the same effect can be felt from different stimuli, i.e., traffic diversions from mode A to B can be a result of 1) underdevelopment of A; 2) excess capacity of B. or 3) a combination of both. At best, with a clearly enunciated policy, and coordination of each mode, a government may try to develop the transportation system it wants by acting on one stimulus or another, thereby effecting changes with a minimum of disruption.

The U.S., however, has neither a clearly enunciated policy, nor a mechanism for implementing one -- if it existed -- in a coordinated fashion. Rather, our decisions are the responsibilities of several agencies and their subsidiary components, each acting with a different mandate, with different budgets, and most importantly with different perceptions of the job to be done.

In American history, the role of government has been to spur the development of new modes of transportation as their benefits and applications became obvious. In the days of the steamboat, we built canals; when the locomotive was proven, massive land grants and other subsidies were given to aid the building of railroads; as the automobile and truck became a force, we built highways; and as the airplane grew its wings, we built airports. By their history of developing a transportation system by developing its modes, all levels of American government have become trapped -- trapped because their concentration on modes has left them blind to the impacts and needs of an entire system, a system composed of separate but inextricably linked modes. Government failed to recognize that a policy designed to cure the problems of one mode could have a disastrous impact on the very existence of another.

Thus, while constructing an enormous system of highways, we ignored the impact that program would have on intercity rail and urban public transit; regulatory agencies alter the structures of whole transportation industries without regard to what their decisions will mean to federal capital investment; and capital investments can be made by one transportation agency, on its constituent mode, without regard to its impact on another.

The result has been to provide huge systems of all types, all of which are malfunctioning, and all of which are not serving the needs to which they are best suited.

All of this is a natural result of a lack of a transportation policy, and more important, the failure of government to derive a mechanism to implement that policy. We feel that Congress must begin what promises to be a long and difficult task of enunciating both a policy and a mechanism by which it can be implemented.

In enunciating a transportation policy, Congress should not merely set forth a series of statements directing the Department of Transportation to insure the achievement of certain goals. Existing statutes are rife with such sections of law, sections which state a policy or direct a federal functionary to produce one -- all to no avail. In fact, given the complexity and breadth of our transportation problems, it is doubtful that any single section of law could encompass or adequately explain a coherent policy. The appropriate place to state a policy is in that section of the law where its implementation can be achieved. If, for example, the Secretary is required to approve a yearly program of projects, Congress could set policy by requiring that certain types of projects are to be given priority over others. Similarly, rather than merely providing that transportation plans be approved by the Secretary, Congress should set forth the conditions under which a plan can be approved. Thus, rather than engaging in legislative exhortation, Congress would make fulfillment of policy a requirement for federal funds -- rather than adding another layer of rhetoric, Congress should seek to force action.

With these two factors in mind -- that Congress should enunciate a policy which the Federal government should be responsible for implementing -- the Coalition believes that four mechanisms of the highway program need to be altered. They are:

- 1) Financing
- 2) Planning
- 3) Program integration and consolidation
- 4) Intergovernmental Relations

FINANCING

The Highway Trust Fund has been the piece de resistance of Congressional "sacred cows" for the past two decades. Initially created as a method of overcoming resistance (by Congress) to spending \$21 billion to build an Interstate Highway System, its financial power and the myth of its fiscal "pay as you go" integrity have grown. Yet, today given vast changes in government budgeting practices, and a recognition that transportation is both used by and affects all citizens of the society -- not just the "highway user," -- it is a glaring anachronism.

Transportation costs and benefits are indivisible public goods: that is, transportation costs and benefits are not merely accrued to or paid by the direct user, but by the society as a whole. One can live in a city, never drive a car, yet still be subject to the air pollution generated by an automobile-dominated transportation system. Similarly, despite the rhetoric of the trucking industry, trucks don't pay taxes, people do. Every cent paid by motor carriers from the so called "user tax," ultimately finds itself computed into the prices of commodities carried.

The idea that transportation is an indivisible public good is hardly a radical one. Transportation is essential to the economic viability of every society. Its costs and development shape economic systems in myriad ways. If the system is efficient -- that is, if its benefits exceed its costs -- then the society as a whole benefits. If, however, its costs to the society exceed its benefits, the society as a whole suffers. This is the basic precept of any text on the economics of transportation, yet despite this, we continue to debate the proposition that only the transportation "user" pays for transportation, therefore any tax on "user products" ought to go for funding transportation. The logical corollary to this notion of user taxes is, that taxes on cigarettes should be used to promote smoking, and that taxes on alcohol ought to promote drinking.

Another rationale for the existence of trust funds is that the importance of the program is such that it should be removed from ordinary budgetary processes. While such an idea may have had validity in 1956, federal budget practices have changed drastically since that time. With the advent of the Budget Control Act of 1974, the previous practice of impoundments -- one used in the past to limit expenditures from the Highway Trust Fund by Administrative action alone -- has been ritualized into the dual action of the Executive and Congress. Congress may now limit the expenditures and so may the Executive, with Congressional agreement. The trust fund, in reality is very much subject to overall restraints on its expenditures.

The only apparent value of the trust fund is to protect the type of transportation mode that can be developed by the trust fund. Leaving it intact merely assures that it will continue to develop enormous surpluses, particularly if restraints are placed on overall spending limits -- surpluses which would otherwise be valuable for relieving other pressing social needs.

The Administration's bill recognizes the basic validity of this argument, in that it would redistribute approximately half of the trust fund's income to other government treasuries (3¢ of the gas tax). The administration has sought, however, to retain half the trust fund for the purpose of completing and indefinitely maintaining the Interstate System, in part on the grounds that this is the only system in which there is a "Federal interest," and that it is of sufficient import to be given priority in construction.

We know of no legislative proposal which seeks to prevent the expeditious completion of the Interstate System, and no Congressional disapproval of that goal. Given that, we see no reason why the Interstate System needs to be protected by a trust fund. From whom is it being protected?

We agree with the proposal of Senators Kennedy and Weicker, as embodied in S. 1300, that the Highway Trust Fund has outlived its usefulness and ought to be abolished.

PLANNING

One of the most often overlooked aspects of our current transportation dilemma is the lack of a coherent planning process. We feel that such a process is overdue, both because it injects into the transportation decisionmaking process a basis on which to judge the long term impacts that currently proposed projects will have upon future transportation needs and problems, and because it would provide the Federal government with a mechanism by which to judge the long term impacts of proposed state and local transportation developments.

The major transportation planning sections of law that exist in the highway and urban mass transit statutes are based upon the 1962 Federal Aid Highway Act's requirement that metropolitan areas develop comprehensive transportation plans as a prerequisite for funding. We suggest that such a prerequisite must also be established for states, and that the Federal government must evaluate those plans to determine whether or not they are in compliance with other governmental policies affected by transportation.

We believe that the need for comprehensive, coordinated planning in the transportation area ^{has} been well illustrated by the chaos which is resulting from the lack of it. It is a lack of coordinated planning which right now allows the government to consider restructuring the bankrupt Northeast railroads without looking at the effect traffic diversion from rails will have upon the highway system. It is a lack of coordinated planning that permitted states to use highways as a method for relieving congestion in our major urban areas -- congestion which, despite the enormous expenditures made on urban highways, has not been alleviated. It is a lack of coordinated planning which causes, in part, the shortages of rail cars for moving grain from our rural areas to their distribution points.

We suggest it is appropriate that Congress require states to develop statewide planning capacity and statewide transportation plans which can and should be reviewed by state legislatures, and the Secretary of Transportation for the purpose of assuring consistency between what a state transportation agency plans and what the public (through its elected representatives) desires.

As regards some of the criteria on which the Federal government should base its approval of the plans, we believe that four areas of concern are critical: safety, energy conservation, environmental protection and consistency with community development plans derived under the Housing Act of 1974.

PROGRAM INTEGRATION AND CONSOLIDATION

A Federal mandate that State and local communities develop comprehensive transportation plans, will however, be a useless exercise unless the Federal government concurrently eliminates its practice of distributing monies for that plan's implementation by modes. In short, we believe it is a prerequisite of implementing a coordinated transportation plan that money be distributed without dictating that it can only be used for one mode.

In order for coordinated transportation planning to work, modal biases that result from unequal funding of what are essentially competing modes must be eliminated. Failure to do so will ultimately destroy any attempt at coordinating planning since different amounts of money and different funding mechanisms will ultimately bias project selection.

This point is definitively illustrated by our last decade's experience with transportation planning. As noted before, the requirement for an urbanized area to develop a comprehensive transportation plan as a prerequisite to obtaining federal highway funds was added to the highway code in 1962. It is also now a requirement of the Urban Mass Transportation Act. However, the planning mechanism, while intact, has not altered the basic nature of our urban transportation systems. We believe that the fault does not lie with the planning mechanism or goal, but rather results from the segregated manner in which transportation funds are distributed. We suggest that no transportation plan, no matter what its goal, can work when the decision of what to build is biased by the funding process. The bias of unequal funding and separate funding mechanisms works to insure that a comprehensive plan will not be realized and that elements of the total plan which rely on modes for which money is not available (or is available only with a greater commitment of local funds) will not be built. Such a bias serves to frustrate the traffic intent of that plan.

We believe that a central element in the Federal government's attempt to cure our transportation problem must be the distribution of transportation money as transportation money. Only by doing so can the inherent bias created by separate and unequal funding mechanisms be removed.

Congress has already begun this task. The 1973 Federal Aid Highway Act included provisions which allow local communities to construct mass transit facilities with monies previously dedicated to highway construction on urban system projects and through the "Interstate Transfer" clause. It is now time to continue this trend by providing rural communities with this option.

Both the Administration and the Kennedy-Weicker proposals contain provisions which would expand transportation flexibility to rural areas. In doing so, both proposals would allow rural areas to use part of their money for the cost of operating such public transportation facilities. However, only the Kennedy-Weicker bill would allow urbanized areas to similarly use their funds for operating subsidies. We far prefer, for this and other reasons, the approach taken by Senators Kennedy and Weicker.

One additional aspect of the Kennedy-Weicker bill which deserves attention is a requirement that programs under the Urban Mass Transportation Act be coordinated with any regulations under the Highway Act which deal with mass transit. We feel that this is necessary to insure that any regulations issued by DOT to cover these activities are consistent with each other in order to prevent separate or unequal mechanisms for funding. We urge the Committee to adopt such language in its version of the legislation.

Another area of the current highway program that we feel needs attention is the proliferation of programs.

Recent highway acts have spawned all sorts of new construction programs, programs which insure that money will be spent in an extremely fragmented manner. Included in these programs are "Priority Primaries," the so called junior interstate program; "Economic Development Growth Center Highways"; and remarkable enough for a government that develops highways by "systems," one program for "Off System Roads." The proliferation of these systems seems directly related to the availability

of surpluses in the Highway Trust Fund.

We believe Congress should eliminate virtually all of these special programs. If the Congress wants to decree that certain types of roads are to be given priority, it ought to do so directly through the mechanisms by which projects are approved and not by merely adding another category to the existing budget. Adding categories serves no real purpose except to obfuscate the program, and confuse the public.

We support provisions in both the Administration and the Kennedy-Weicker proposals establishing three basic systems: the Interstate System, which is left intact; the Rural System, primarily a combination of the existing Primary and Secondary Systems and all other rurally oriented programs; and the Urban System, for all transportation within urbanized areas.

INTERGOVERNMENTAL RELATIONS

In order for a comprehensive Federal transportation policy to succeed, it must be able to be implemented by state as well as Federal agencies. Two aspects of the current highway program do not lend themselves to such changes.

First, the highway statutes rely for implementation on state highway departments, both as project planners and selectors. Single purpose agencies cannot implement multi-purpose plans. Thus we believe that states, as a condition for receiving Federal funds, should have state transportation agencies responsible for transportation planning on a statewide basis.

Second, under current law, urbanized areas are responsible for the development of comprehensive transportation plans. They are not, however, given the authority to do project selection, i.e., they do not control the money. Although the 1973 Federal Aid Highway Act "earmarked" a percentage of funds for urbanized areas with a population of 200,000 or more, the control still resides with the state highway departments.

In the area of project selection, where local decisionmaking is most appropriate for transportation purposes, we find that the need for local control is being ignored. Here we believe is where the concept that the government closest to the problem is the one best suited to deal with it, is most applicable. The Urban Mass Transportation Administration has traditionally dealt with specially created and locally

responsible transportation agencies, while the highway code has given primary responsibility to state highway departments. However, the concept that urban area needs should, or adequately can, be served by state highway departments is outmoded.

We believe that urbanized areas must be given the authority to plan and implement their own transportation system. In this regard, urbanized areas should be allowed to develop plans for inclusion into statewide plans without the state being able to modify them unilaterally, and that money previously earmarked for urban areas be "passed through" to them. Mechanisms for accomplishing this are contained in the Kennedy-Weicker proposal and we urge the Committee to adopt them.

In conclusion, I would like to say that the Coalition recognizes that much of what we feel desirable for rectifying our national transportation problems involves restructuring many basic parts of the highway program. We do not expect that our transportation problems can be solved overnight, and we welcome every opportunity to assist the committee in its deliberations. However, we do believe that there is a job to be done, and that the job is to begin the establishment of a national transportation program which is guided by enunciated policies, and is implemented by Federal agencies with the mandate of assuring our country gets the transportation service it needs. We urge, therefore that you undertake a reexamination of the Federal highway program with the thought that it is really a Federal transportation program, and hope that you are willing to make it truly a mechanism for providing transportation.

Senator RANDOLPH. Mr. Koltnow?

**STATEMENT OF PETER G. KOLTNOW, PRESIDENT, HIGHWAY USERS
FEDERATION**

Mr. KOLTNOW. Thank you, Mr. Chairman.

Mr. Chairman, I am Peter G. Koltnow, president of the Highway Users Federation. With me today is the director of our Transportation Development Division; and Steve O'Toole, of our public information staff.

We have a longer statement which has been submitted for the record. I will stick to a shorter one.

The subject of this panel—the Federal role in the highway program—involves three questions, as we see it.

First: Is there a need for a continuing highway program?

Second: What is the role of the Federal Government in such a program? And,

Third: How can the Federal role best be carried out at this time in American transportation history.

To the first question, our members—users and suppliers of highway transportation in the United States—answer an emphatic “yes.”

In just 15 years—by 1990—there will be 161 million drivers—around 35 million more than today, although there will be a dip and has been a dip in auto travel between now and then.

Senator DOMENICI. Might I stop the witness?

Senator RANDOLPH. Yes.

Senator DOMENICI. What is going to be the new fuel availability by 1990 that is going to make us reach your prediction?

Mr. KOLTNOW. It is our hope, Senator Domenici, that both the Outer Continental Shelf and the bringing in of the North Shore will have provided us with substantial new domestic fuel supplies by that time. Also, as I have noted here, improved vehicle efficiency will also be a substantial factor by 1990.

However, prior to that time, we do see a substantial drop, especially in the short term, in automobile vehicle miles of travel. Some of that is already taking place. We think it will continue for a period of time.

Senator DOMENICI. Are you assuming we are going to stop using petroleum based products for other things and use them all for automobiles in this prediction of yours?

Mr. KOLTNOW. Certainly not.

Senator DOMENICI. How long do you think we are going to have petroleum based products for human consumption based on the present growth and use? Are you either pessimistic or the optimistic, or do you think there is no end to it?

Mr. KOLTNOW. I think clearly there is an end. I am not a petroleum expert. The material I have seen indicates that there is an end ultimately to petroleum supplies. I can't say where that end is.

My impression is that our energy needs in this country will continue to be met substantially by petroleum for the remainder of this century. Every estimate I have seen from all sources, both government and private, indicate that.

We heartily support all of those steps which have real potential for reducing our reliance on petroleum over the long haul and which will make the best use of the petroleum we have in the short and medium term.

Senator DOMENICI. I yield.

Senator STAFFORD. I just want to inquire at this point, also, if your predictions on the use of automobile fuels in the future takes into consideration the fact that our geological experts have estimated, I think, something like a 400 percent reduction in recoverable oil in the Continental Shelf of the United States from estimates of 2 or 3 years ago. Has that been taken into consideration?

Mr. KOLTNOW. We are certainly aware of the fact that the estimates of the Outer Continental Shelf reserves fluctuate, both up and down. Senator STAFFORD. In the last 3 years it has been down.

Mr. KOLTNOW. That is correct. We see, however, in the near future, no ability to move away substantially from oil dependency.

Senator STAFFORD. I don't suppose it would be possible to predict—and I wouldn't really ask you to—what the impact of another embargo would be on the future consumption of oil.

Mr. KOLTNOW. I would hate to think of what that is, Senator Stafford.

Senator STAFFORD. I won't ask you. I yield, also.

Senator DOMENICI. I have been a staunch supporter of highway construction. I am not the least bit reluctant to tell you that I think your introductory paragraph wherein you justify that program by predicting the accelerated use of automobiles and consumption of fuel for individual mobility is not needed at all to justify the huge demands placed upon the trust fund.

I don't think we need those kinds of predictions because they are not going to be true. If they are, we are a very, very shortsighted group of people. However we need the expenditures for the highways without those kind of predictions.

When I come back, we can talk about it some more.

I was hoping you were going to say maybe we would have an alternate source of energy for individual mobility. That is why I originally asked the question, but presumably you think it would be gasoline or diesel fuel in the quantities you have discussed.

Senator RANDOLPH. Thank you very much, Senator.

Will you continue, please?

Mr. KOLTNOW. Yes.

By 1990, fuel availability and improved vehicle efficiency should permit an increase in motor vehicle transportation to the level predicted in the 1972 National Highway Needs Report—that is, to around 600 billion more miles a year than now.

Not only our growing population, but our lifestyle points to such an increase. Most Americans prefer and are committed to low density living. Most industry and much retail trade are committed to widely scattered sites, served only by rubber tired transportation.

Best estimates are that, by 1990, our central cities will have grown 6 percent over 1970, but suburban populations will have doubled. Americans cannot be forced into a high density mold in order to become less dependent on highway transportation.

Improved public mass transportation, while needed, is not an alternative to highway transportation on any large scale. A U.S. Department of Transportation report indicates that if all State and urban government proposals for upgrading transit were put into effect, at a cost of \$61 billion in 1971, transit ridership still would rise from 5.2 to only 6.2 percent of all weekday urban passenger trips.

What is more, as we all know, the nation is highly dependent on truck transport to keep the economy moving in urban and rural areas alike. Many agricultural commodities are carried entirely by trucks.

All this adds up to the need for a highway system that will give better, safer service than we have today.

Instead, however, we are permitting our existing roads and streets to deteriorate faster than they are being rebuilt; 50 percent faster, Federal Highway Administrator Tiemann tells us.

Obviously, a continuing, strong highway program is urgent in the national interest.

To the second point, we are equally convinced that the Federal Government has a vital role in such a program.

Federal participation is necessary for:

Leadership in meeting new or urgent needs;

Nationwide integration of major highways;

Sufficient road and street improvement in less affluent States;

Uniform standards for all important routes; and

Provision for needed highway development projects which require larger capital outlays than an individual State or local community could accumulate.

The national highway partnership of Federal, State and local government has been built on Federal financial participation. Now—when State and local resources for highways are strained and uncertain—that assistance should not be withdrawn or lessened.

The national interest in all transportation—and certainly in highways—is such that the Federal Government's role in a future highway program should be strengthened—not weakened.

The remainder of this statement—and most of the more detailed one we have filed—deal with the third question we feel to be involved in today's panel discussion—that is, how can the Federal Government best fulfill its responsibilities. Since the present policy and way of operating are, in general, successful, we are suggesting no radical changes—only some important fine tuning.

The Federal role in integrating major highways remains to be carried out with regard to the Interstate System of which 85 percent is open to traffic today, but less than a third fully meets today's standards. Because of its importance in binding the Nation together, its excellent safety record and the economy and fuel efficiency it affords, the freight, personal movement, the interstate should continue to have high national priority.

The Federal role of equalizing quality of transportation is nowhere so clearly needed as in connection with this system.

We feel the Federal Government should continue to fund 90 percent of the cost of closing the interstate gaps and to participate in the reinvestment required to keep it a top quality national system.

Our studies show that the only Federal share of completing an integrated system, including essential upgrading and rehabilitation and allowing a 7-percent inflationary factor, would be \$5.6 billion annually, if done by 1985; and \$4.8 billion, if extended to 1990.

The interstate saves lives, time, fuel, and operating dollars. A firm date for its completion and realistic financing should be established.

Out of thousands of interstate projects, only 29 in 16 States are still on the controversial list. They total less than 300 miles. Some, however, are bottlenecks and some pose serious safety problems.

Decisions on these controversial sections should be made promptly, as called for by Congress in 1973. Related Department of Transportation regulations have caused delays. Congress should call for completion schedules soon, and should prohibit expenditure of interstate funds on any section not essential for system continuity and for which a schedule is not provided.

Interstate allocation procedures also should be modified to give priority to segments that can be completed quickly and that serve the most traffic or have the greatest safety need.

New legislation also should establish a method and schedule for freeing rural interstate roads from tolls, which are a form of double taxation.

In addition to the interstate, other nationally significant roads and streets, established in accordance with the 1973 Federal-Aid Highway Act—merit continuing Federal aid. The Federal equalization role is important here, as is its responsibility to encourage consistent standards of safety and efficient service for travelers and movers of goods.

To simplify Federal aid procedures, we urge limiting the number of Federal aid categories to five: Interstate; primary, rural and urban; rural secondary; urban, and—safety about which we comment separately.

Within each broad category, the States should be allowed to determine their own priorities. Congress should indicate its general priority concerns and the Secretary of Transportation should urge the States to give full consideration to this advice.

Legislation also should eliminate detailed procedures between the Federal Highway Administration and the States. Instead, Federal survey teams could serve as judges of the quality of the States highway programs, and of their compliance with Federal mandates.

Passthrough provisions should continue but with more flexibility to take into account differences between and within the States.

Finally, Congress should initiate promptly an analysis of all the requirements of various laws, regulations and agency directives which bear on highway modernization—including their effects at State and local levels.

There are now 23 basic steps, plus a number of minor ones, involved in bringing a Federal aid project to completion. In addition, the National Environmental Policy Act, the Clean Air Act, the Federal Water Pollution Control Act—and many others—all have their own requirements, some of which surely could be consolidated or streamlined.

The Federal Government should continue its leadership role in other highway matters; the most important of which is safety.

A larger Federal commitment to safety would spur States and local governments to greater investments on their own. This has been proved by the "402" programs, in which a 1½ percent Federal participation has encouraged the States and local governments to more than quadruple their own investment in less than 10 years. An increase of Federal funding for safety of about 10 percent per year through 1980 is strongly recommended.

Present highway safety program standards also should be revised to emphasize activities with potentially greater payoff, and short- and long-term goals and objectives should be established in every program area.

Particularly, as a key to the future, we urge that Federal aid for safety manpower training be continued and expanded.

Of all traffic safety measures, the one whose effectiveness is best documented is the improvement of highway facilities. In 1973, Congress authorized for a 3-year period, an average annual funding of \$383.3 million for six categories of safety-related projects.

We recommend that these be combined in a single program to give safety greater prominence. We further recommend that longer term funding be assured.

Other areas where Federal leadership should be strengthened are research—and traffic management. Both can lead to greater service, safety and energy-efficiency from existing roads and streets.

As for research, more Federal administrative direction, and limited but stable funding to develop safety techniques and highway design improvements, should be emphasized. Intermodal research funding also should be established to find better solutions to urban problems.

Federal leadership and funding also are needed for demonstration programs that will help bring about better traffic management, increase cooperation between public and private agencies to further ride sharing and other means of improving traffic flow. Coordination of all Federal activities in the traffic management area would increase efficiency and productivity.

An essential part of the total Federal responsibility we have been discussing is, of course, financial.

We strongly recommend the continuation of the Highway Trust Fund as a source of funding only for Federal-aid, highway related programs. Because the need is so great, the fund's full income should be authorized and used as rapidly as available.

The trust fund permits the long range systematic planning urgently required to make our highways safe and adequate to our present and future needs. Advance contract authority is essential to sound planning and management of multiyear public works programs.

Should Congress change the financing basis for the highway program—and we don't suggest that it should—it will be vital to assure that long range financial planning is not sacrificed at the same time.

Senator RANDOLPH. We are in the process, as you know, of a rollcall. I have about 4 minutes. I am fast on my feet, you will understand, and I will make it there. I think that the other gentlemen will return momentarily and then we can continue.

Placing it in context at a later period, I think Ric, you might talk for the record with Mr. Arrow filling him in on what went on this morning as if I were asking the questions.

Mr. FENTON. Mr. Arrow, this morning we addressed questions to Mr. Ritchie and had him respond to your testimony in which you indicated that although the urbanized area was responsible for development of comprehensive transportation planning, that often it is not given the authority to select projects because the State transportation agencies actually control the purse strings.

I want to clarify one thing. It was the committee's intent under section 105 of title 23, subsection (d), that such projects be selected by the appropriate local officials with the concurrence of the State transportation agency.

Mr. ARROW. We have seen the phrase "with the concurrence" operates both in that subsection and with 134 and we don't believe that it is operating in the manner that it should be.

Mr. FENTON. Yes. You are saying the intent not being carried out by administrative design?

Mr. ARROW. I would say the statute really isn't being carried out if its intent isn't being carried out. It is our position that if they don't control the purse strings that it is easier for them to be able to actually select the projects, if they control the purse strings and if it is controlled, we have a perfect example out here in Arlington.

Mr. FENTON. Do any of you other gentlemen care to comment? Since everybody has testified, we will go to the questioning of the various panel members.

Mr. CIANCHETTE. We will start with you. Most of the witnesses' testimony this morning and again this afternoon, seems to agree that the proper level of funding for the completion of the Interstate System would be about \$5 billion per year.

Yet, the administration has proposed for the fiscal year 1977 through 1980 an average annual program level of about \$3.4 billion.

My question is: If we add a 7 percent inflation factor, do you feel that the \$3.4 billion program for the interstate system will finish that system by 1985, which the administration suggested, or will the program be continued indefinitely because of that inflation factor, which will probably remain a constant?

Mr. CIANCHETTE. I think the projection that our association has made is that at the funding level in the administration's bill the interstate would not be complete and we had a chart with various levels of inflation. I think at the 7-percent rate it would be about 1990 before it could be completed at that level of funding.

Senator STAFFORD. Does anybody else wish to comment? Mr. Arrow?

Mr. ARROW. I would like to suggest that there is one thing that has always fascinated me about recommendations for specific programs.

I would like to suggest that it is perhaps more appropriate to determine what priorities exist first, what the overall budget should be and then work backward from there.

I really don't know if \$5 billion is appropriate for the interstate because Congress has not said what it wants to accomplish first.

Perhaps the \$5 billion would have even if one accepted that figure a bigger bang for the buck if we accepted the administration's idea that the major urban parts of the Interstate System which don't really furnish an interstate program, but act as a commuter road be half weighted in the apportionment formula.

Senator STAFFORD. Thank you, Mr. Arrow.

We are convinced that the national need for a strong, integrated transportation network would be badly served by efforts to rob Peter to pay Paul. We believe that user fees, such as those supporting the highway trust fund, should have first consideration as a source of funding for all transportation programs.

To the extent that additional public support is justified, whether for public mass transit or any other transportation mode, including highways, that support should come from general funds.

To summarize, in order that the Federal Government can best fulfill its vital role, the Highway Users Federation recommends:

Prompt completion, upgrading and preservation of the Interstate System;

Continued funding, and coordinated and streamlined policies and procedures, for other high priority urban and rural highway improvement;

Expanded concern for highway safety, including emphasis on highest payoff activities and on efficient traffic management, and research and demonstration programs; and

Continuation of the highway trust fund as a source of funding only for Federal-aid highway-related programs.

Thank you for the opportunity to present our views.

[Mr. Koltnow's written statement and a letter from the United Fresh Fruit and Vegetable Association relative to Mr. Koltnow's statement follows:]

TESTIMONY OF PETER G. KOLTNOW
PRESIDENT
HIGHWAY USERS FEDERATION
BEFORE THE
TRANSPORTATION SUBCOMMITTEE
COMMITTEE ON PUBLIC WORKS
UNITED STATES SENATE

July 24, 1975

HIGHWAY USERS FEDERATION

for Safety and Mobility

OFFICE OF THE PRESIDENT

July 24, 1975

The Honorable Lloyd Bentsen
Chairman, Subcommittee on Transportation
Committee on Public Works
United States Senate
Washington, D. C. 20510

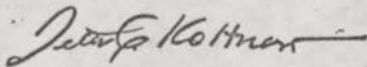
Dear Mr. Chairman:

Attached is our complete statement for the Subcommittee's hearing today on "The Federal Role in the Highway Program."

For the record, the Highway Users Federation is a non-profit business league composed of more than 600 businesses and industry associations. We have affiliated highway user organizations in every state and 35 major metropolitan areas. Our member groups and their affiliates -- including food producers, rural letter carriers, shippers, motor vehicle manufacturers and dealers, insurance companies, banks, major passenger car, truck and bus organizations, news media, and petroleum, rubber and other industries directly dependent on good transportation -- represent millions of Americans.

Thank you very much for this opportunity to present our views.

Sincerely,



Peter G. Koltnow

Attachment

FOREWORD

The Congress of the United States declared its National Transportation Policy 35 years ago, in the Interstate Commerce Act of 1940, when it stated the intent " . . . to promote safe, adequate, economical and efficient service and foster sound economic conditions in transportation." This includes all transportation modes.

The Highway Users Federation believes this is a wise policy. The Federal interest should extend to the total transportation system -- because of its economic and social significance, contributions to national defense, and because of its tremendous needs.

The Federation is aware of the benefit and needs of all ground transportation. Our primary interest, however, is in highway transportation -- by far the largest part of the total system -- and the subject of these hearings. Our comments, therefore, will be confined to highway transportation.

EXECUTIVE SUMMARY

The importance of the Federal role in highway transportation in cooperation with state and local effort is clear and certain. Federal leadership and incentives are essential to achieve reasonably equal opportunities for safe mobility among the citizens of all states, and efficient, economical movement of goods throughout the nation. Federal leadership and participation makes possible nationwide integration of major highways; sufficient road and street improvement in less affluent states; uniform standards for all important routes, and provision for needed highway development projects which require larger capital outlays than the states and local communities could be expected to provide.

In large part, we believe the Federal government has fulfilled its role well in recent years. We see nothing in present conditions to justify major departure from a proven, successful policy and way of operating. Indeed, the only large change we see is the greater necessity for Federal leadership and assistance in these times when road and street needs are high, and state and local resources for highways are strained and uncertain.

So that the Federal government can continue to fulfill its vital role successfully in such times, we urge the Congress to enact a highway program which clearly defines the following Federal responsibilities:

- prompt completion, upgrading and preservation of the Interstate System,
- continued funding for high priority urban and rural highway improvement,

- expanded concern for highway safety, efficient traffic management, and research and development,
- coordinated and streamlined policies and procedures within the Federal establishment, and between the Federal and state and local governments,
- continuation of the Highway Trust Fund as a source of funding only for Federal-aid highway related programs.

The Federation's testimony speaks to these points.

The Interstate

Congress has declared that the Interstate System is of "primary importance to the national defense (and) is essential to the national interest" President Franklin D. Roosevelt, in recommending the designation of the System in 1944, said, "Its development will establish a transcontinental network of modern roads essential to the future economic welfare and defense of the Nation."

With 85 percent of its mileage now open to traffic (although less than a third fully meets current standards), the Interstate has demonstrated its ability to save lives and reduce accident costs; to lower substantially the cost of moving goods by truck; and to provide essential transportation services for a growing economy.

Comprising about one percent of the nation's total road mileage, the Interstate, when completed, will carry about 20 percent of all traffic, with an accident fatality rate two and a half times better than conventional highways. If upgraded to planned standards, and if properly maintained and operated, the Interstate, according to authoritative estimates, will save \$139 billion in costs of fuel, accidents and truck transportation during the period 1956-1990. These savings will continue from one generation to the next, meaning the return on investment will be much greater than the cost of the System.

What's more, benefits, in dollars, do not take into account values for time saved by motorists and passengers in buses using the Interstate, nor do they reflect the social values of lives saved or mobility added. Greater convenience, safety and wider social horizons for each family undoubtedly are reasons why, in a recent

Gallup survey, 82 percent of the American people said that work should continue on the Interstate at the present rate, or faster.

The value of Federal leadership is illustrated by the fact that a single set of standards was established for this entire nationwide System which reflected the best knowledge and practice when the System was created, and which has been upgraded from time to time since. Future upgrading of standards is equally essential so that this important System may go on benefiting from research and experience.

In the environmental field, the Interstate program has made positive contributions to social and aesthetic values. Out of many thousands, only 29 projects in 16 states are still on the controversial list. They total less than 300 miles in the 42,500-mile System. Some, however, are bottlenecks at critical points in urban systems. Moreover, these and other unfinished sections of the Interstate, both urban and rural, have average fatality rates twice as high as the completed sections.

Final decisions on controversial sections of the Interstate should be made promptly, as called for by Congress in 1973. Interpretive regulations by the Department of Transportation have brought about delays. These regulations should be countermanded by Congressional action prohibiting expenditure of Interstate funds on any section not essential for System continuity for which a good faith schedule of completion is not established by the end of the current fiscal year.

In all decisions relative to the Interstate, the objective of a fully connected and integrated national system should weigh heavily.

Alternate locations or new sections should not be permitted unless they are vital to connecting and integrating the established System. We recommend that undeveloped segments of the designated System be reexamined to assure that they meet all the qualifications of the System as a whole. Those that do not should be removed from the System and retained solely as Federal-aid Primary routes.

The estimated total costs of the Interstate have continued to rise. The first detailed estimate, in 1959, put the total cost at \$41 billion. By 1972, the figure had zoomed to \$76.3 billion, and this year's estimate is about \$89 billion.

Much of the higher cost prior to 1972 was attributable to up-grading of standards, and to changes made in the System itself by Congress. Since then, however, inflation has been the dominant factor. One fact dramatizes the current problem: \$10.5 billion has been invested in Interstate projects during the last three years, yet the estimated cost of completing the System is practically the same as it was three years ago.

Our studies indicate that the annual Federal share of completing an integrated Interstate System under current financing methods, including upgrading and rehabilitation and allowing a seven percent inflationary factor, would be \$5.6 billion if done by 1985, and \$4.8 billion annually if extended to 1990.

We strongly urge that Congress establish a firm date for completion of the System and provide at this time for continuing 90 percent Federal financing, with realistic recognition of the effects of future inflation. We believe that this national commitment should have first call on revenues in the Highway Trust Fund.

At the inception of the Interstate program, Congress provided that funds be allocated on an equitable basis which would best promote the simultaneous completion of the System in all states. We recommend that this policy, sound in the initial phases of the program, be modified in two ways to expedite closing remaining gaps in the System.

First, we suggest that the apportionment of Interstate funds among the states continue to be based on the proportional "cost to complete" but with the provision that apportionment be omitted for one year to any state which has unobligated Interstate funds from prior years in excess of one and one-half times its annual apportionment. This process would not deprive any state of funds which it could use productively. It would assure, however, that funds authorized by Congress go to states capable of putting them to work promptly. As a state caught up with its backlog of unobligated funds, it would become eligible automatically for a larger share of future allocations.

Second, we suggest that the authorizations freed by the above process be allocated on a formula developed by the Secretary, in consultation with the states, which would give priority to segments which could be completed (or upgraded) quickly, and which serve the highest traffic volumes and present the greatest safety need.

We also recommend that Congress establish at this time its intent that the Interstate be preserved as the highest quality road network in the nation. As standards for maximum service and safety are revised, as sections reach the traffic volumes they can handle safely, and as ravages of time affect pavement and structure,

reinvestment is required. We believe that such reinvestment is as important to the national welfare as the original installation and, accordingly, that the law should be amended to make it eligible for 90% Federal participation.

Finally, we urge Congress to establish methods and timetables to eliminate tolls which exist on 2,300 miles of rural Interstate roads. Existing law indicates Congressional intent to do this but no action has resulted. These tolls represent a form of double taxation and are unfair to consumers.

We do not recommend, however, a timetable which would eliminate these tolls prior to completion of all segments of an integrated Interstate System.

To summarize our views with respect to Federal responsibility for the Interstate System, we urge that Congress:

- direct that the Federal government continue to provide 90 percent of the cost of completing the Interstate System and of the cost of upgrading it, where needed, to top standards of safety and service,
- insure that national priority be given its completion by a specific date,
- direct that early decisions be made on controversial segments whose completion is in doubt, prohibiting alterations or additions which may not fully qualify,
- modify Interstate allocation procedures to omit the annual apportionment to states with ample unobligated balances and to apply these authorizations to high priority gaps capable of rapid completion,
- establish method and schedule to free rural Interstate roads from existing tolls.

Other Urban and Rural Highways

Since World War II, Federal aid has provided about 17 percent of total capital investment made for highways by Federal, state and local governments, other than for the Interstate System.

We believe there is an appropriate continuing role for Federal participation in improving the road networks which serve 80 percent of the nation's highway movement of people and goods. This role is not one of dictating precisely where improvements should be made but rather of assuring a reasonable level of investment in the most important road systems, particularly in those states where local resources are incapable of meeting social and developmental needs.

As shown later, Federation studies indicate that -- disregarding inflation and badly needed improvements in service -- a minimum investment of about \$7 billion is required annually just to replace road sections which become physically or functionally obsolete. We believe that the proven system of helping to finance this road improvement from highway user funds, collected nationally for this purpose and distributed to the states on an equitable formula, continues to be effective, appropriate and essential to the national welfare.

While road improvement in the United States traditionally has been accomplished jointly by Federal, state and local political entities, many of the most significant highway developments have been initiated and promoted with Federal leadership and assistance. In order to be eligible for Federal aid, the states have developed competent organizations and procedures to evaluate highway needs and

to allocate funds to meet them. This has been helped by new means of communication, exchange of information and by research organizations, strongly assisted by Federal agencies and funds. States and local governments, supplying 83 percent of capital funds (except Interstate) and all maintenance and operation of the entire road and street network, retain the major responsibilities for decision-making.

We believe that state and local governments are fully capable in highway matters and can determine their own priorities best. Thus we urge Congress to limit its efforts to dictate state and local programs through dividing available Federal funds into numerous special purpose categories.

Currently, there are at least 26 categories apportioned to the states reflecting Congressional concern about the priority use of Federal funds. Better results could be obtained, with fewer categories, if the Secretary of Transportation requested the states to give priority consideration to using Federal funds for the purposes desired by Congress. Reporting procedures could be improved to classify expenditures by such purposes and oversight hearings would allow Congress to evaluate the various types of development.

Where necessary, existing law could be modified to insure that desired purposes were encouraged, though not required, in expending Federal funds. An example is the TOPICS (Traffic Operations Programs to Increase Capacity and Safety) program, which was a separate category for a few years. More recently, definitions of allowable work in the "regular" highway funding categories were revised to permit TOPICS activities, and this special category was dropped.

We recommend, therefore, that future Federal-aid highway apportionments to the states be limited to five categories, namely: the functionally classified systems called for in the 1973 Act -- Interstate, Primary (rural and urban), Rural Secondary, and Urban -- and Safety.

These systems will provide a relatively uniform means of establishing national priorities. They should be based on the degree of benefits accruing to all the people of the nation rather than on localized benefits. However, the Act should be revised to limit the Urban system to classified "principal" and "minor" arterials. This would exclude the "collectors" as now permitted, and produce urban systems more comparable functionally to the reclassified Rural Secondary system.

To insure sufficient, reasonable expenditures of Federal funds for urban systems, "pass-through" provisions should be continued but with greater flexibility. Prior to the existing law on this subject, nearly half of all Federal-aid Highway Trust Funds were spent in urban areas, as determined by the states with cooperation of local governments. We believe that the present segregation of Primary and Secondary funds into rural and urban portions is unnecessary and -- in many cases -- results in less urban improvement than formerly. This is partly because apportionment formulas cannot fully account for the numerous variations among and within states, nor for the different planning and physical problems among their urban areas.

Consideration should also be given to revision of apportionment formulas to reflect the new functional classes and their need in the states and urban areas, and the contributions their residents

make to the Highway Trust Fund.

The greatest returns on Federal dollar investment will be obtained by the use of these limited resources on such systems, including Interstate and Primary, thereby releasing state and local funds for use on roads and streets of less national importance. Specifically, we do not recommend the extension of Federal aid to roads and streets not on the revised classified systems. These should remain the fiscal responsibility of state and local governments, and of private developers and owners of abutting property.

The broad state and community safety grant program (Section 402) should, of course, continue to be available and applicable in all areas.

Because the lead time in advance of actual obligation of funds for highway construction continues to stretch out, we urge Congress to authorize programs for four years in advance.

To summarize our recommendations on the role of the Federal government related to the most important urban and rural highways, other than the Interstate, we urge that the Congress:

- continue Federal highway aid for the nationally significant classes of roads and streets established according to the 1973 Federal-Aid Highway Act, with some modification of the Urban System,
- reduce apportioned Federal-aid categories to: 1. Interstate, 2. Primary, rural and urban, 3. Rural Secondary, 4. Urban and 5. Safety -- to be discussed later -- and authorize for four year periods,
- indicate its general priority concerns within these categories and request the Secretary of Transportation to so advise the states,
- increase the flexibility of "pass-through" provisions for urbanized areas,
- leave fiscal responsibility for "off-system" roads and streets, and for maintenance to state and local government, with the exception of safety programs.

In its decisions on a highway program, Congress, of course, must take into account future growth and issues likely to affect it. Important among such considerations is the nation's energy problem.

The Federation has examined various potentials for saving petroleum, and concluded that as much as half the Administration's goal of saving two million barrels of petroleum a day may be required from gasoline users. This could result in a one-sixth reduction in passenger car travel from the peak year of 1973.

At the same time, however, truck use is likely to grow at about the past rate. Trucks comprise one of every six motor vehicles, roll up 20 percent of all motor vehicle miles of travel, and account for 79 percent of freight revenues of common carriers. Truck travel is today three times what it was in 1950.

The reduction in passenger car travel would be about half the drop experienced during World War II. But, as shown in Chart A, conservation would be extended longer, until new domestic oil production and improved vehicle efficiency permit us to meet growing travel needs.

By 1990, increased fuel availability and improved vehicle efficiency is expected to permit, and a growing population and economy will require, an increase to the motor vehicle travel level of 1.9 trillion miles annually, as predicted by the U. S. Department of Transportation in its 1972 National Highway Needs Report.

This growth is inevitable, short of catastrophic changes in American life. The driving age population is rapidly rising as persons born in the post-World War II "baby boom" come of age. The following table shows what is expected.

Driving Age Population
(millions)

<u>Age</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>
15-24	37	41	36
25-35	25	37	43
35-64	65	69	82
65+	20	24	28
	147	171	189

As for alternatives to highway transportation, there are no "magic bullets." Public mass transportation needs improvement. But, a U. S. Department of Transportation report last summer indicated that, if all the state and urban government proposals for upgrading transit systems, costing \$61 billion in 1971 dollars, were put into effect, transit ridership would only rise from 5.2 percent to 6.2 percent of all urban area week-day passenger trips. The absolute number of passenger car trips will increase 68 percent.

The low-density areas of single family homes, preferred by most Americans, coupled with scattered employment and shopping centers, make individual personal transportation indispensable for most people. Furthermore, prospects are remote for reducing travel needs by returning to high density living and concentrating activities in a few centers.

A Task Force of the Science Advisory Panel, created to advise the Committee on Public Works of the U. S. House of Representatives, reported in November 1974: "Transportation planning and investment should be directed primarily to serving present populations, where they are now settled."

Within urbanized areas, suburban population jumped two and a

half times, to 54 million people between 1950 and 1970, while the central cities grew by a third to about 64 million. By 1990 suburbs of the nation's urbanized areas are expected to more than double in population to 110 million. Central cities are expected to house about 68 million, a modest increase of 4 million.

Employment in the suburbs jumped dramatically in the 1960s. Of the workers living in all metropolitan areas over 100,000 population, 46 percent in 1970 were employed in the suburbs or beyond; and only eight percent worked in the principal business districts of the central cities. Of those living in the suburbs, 60 percent work there, only five percent work downtown, 27 percent work elsewhere in the central cities, and 8% work outside the metropolitan areas.

These facts -- scattered work destinations and homes for a growing number of people -- explain the increasing demand for essential highway services and the problem in providing efficient public mass transportation.

However, numerous opportunities for improved efficiency of highway transportation do exist, such as car and vanpools, increased use of taxis, jitneys and buses, smoothing traffic flow on city streets, and more efficient use of trucks. Most of the potential improvements in passenger car use -- and in transit use as well -- depend upon increasing the ability of highways to move traffic efficiently.

RURAL ROADS

Besides modernization of highways in urban areas, there is a growing need for improvement of rural roads throughout the country. A Gallup survey commissioned by the Federation found recently that

Since 1914, about \$161 billion has been spent on creating our highway, road and street network, not including rights-of-way or the Interstate System. That amount is the equivalent of 400 billion 1974 dollars, in terms of physical work over the years. But only \$270 billion worth remains in service, and this amount is already half worn out.

If no additional capital funds were invested, our highway plant would lose all its remaining value by about 2030. It would be gone as a usable facility.

The level of expenditure sufficient to hold the investment constant -- in other words, no better or no worse than today -- averages \$7 billion per year to 1990 in 1974 dollars -- about three-quarters the average investment in these roads by all levels of government during the last 10 years.

However, if we assume a continuing seven percent annual inflation rate -- the average between 1967 and 1973 -- the average annual investment through 1990 would have to be \$14.4 billion, more than twice what was spent in 1974. This is in addition to what would be required if we are to complete and preserve the Interstate System.

Relative to the Gross National Product, highway construction expenditures, by all levels of government, hovered around two percent before World War II. But in recent years, travel has been growing more rapidly, while investment in the highway plant, including the Interstate System, has dropped to less than one percent.

The examination of this situation by Congress at this time is particularly fortuitous. Only its wise and considered action can head off highway -- and therefore transportation -- disaster, in our view.

Other Important Federal Highway Programs

The Federal interest in highway transportation encompasses three other major areas of national concern:

- Highway Safety
- Highway Traffic Management and
- Highway Research.

Federal highway funds traditionally have advanced these activities. Continuing support should continue to be an important part of the Federal highway transportation program because the activities are essential to safe, efficient mobility on all roads and streets.

Highway Safety

Community Grant Program -- Prior to 1966, highway safety programs were largely the responsibility of states and municipalities, aided by private sector groups which funded research and training. While collaboration and exchange of information took place, there were performance standards in only a few safety areas -- notably highway design and, to a lesser extent, driver licensing and vehicle component requirements.

The Highway Safety Act of 1966 has helped standardization in safety activity across the nation.

The Act created a Federal-state highway safety partnership in which the municipalities and counties also participate.

The Act also provided for Federally-funded safety research and demonstration programs. Both functions are now funded by the direct beneficiaries -- highway users -- through the Highway Trust Fund, as are special highway safety improvement construction programs.

The Federal program gives essential pump-priming to help states and their political subdivisions upgrade people-oriented traffic safety programs. Federal leadership holds the national effort together, as well as transmitting a sense of national priority for traffic safety.

The Department of Transportation estimates that Federal dollars represent only about one and one-half percent of total government (Federal, state and local) expenditures for the Section "402" program alone. With Federal money as an incentive, state and local government expenditure for "402" types of projects has grown from about \$1.5 billion per year in the mid-1960s to an estimated \$6.6 billion this year.

Since enactment of the Highway Act in 1966, the traffic fatality rate has declined from 5.7 per 100 million vehicle miles of travel to 3.6, by far the lowest in the world in 1974.

But there still is much to do. Throughout the United States, programs to upgrade state and community activity are under way in all areas of accident prevention, but only a few states are maintaining a desirable level of performance.

We believe that a larger Federal commitment will spur state and local governments to further investment and that the Federal

contribution to the safety partnership should be increased at a regular rate each year through 1980. We recommend an annual increase of about 10 percent, as a sound level of growth for the 402 program. Additionally, continued Federal coordination and guidance are needed.

We believe that the substance of the national program can be strengthened by a revision of present highway safety program standards which place greater emphasis on activities with potentially high safety payoff. Current standards are not sufficiently result-oriented. Short and longer term safety goals and objectives to be reached through implementation of standards requirements by states and their political subdivisions should be established in every program area.

Federal aid for safety manpower training to help increase both the numbers and professionalism of practitioners in official state and community program areas should be continued and expanded. Well-trained personnel are the key to future progress of the national effort. A related need is to upgrade planning and administration capabilities of officials who carry out the community level safety program. Accidents happen locally; safety services to highway users are delivered locally. We will not realize the safety potentials of the national program until the community level safety structure is operational and effective in every state, similar to that at the state level. This was called for in the Highway Safety Act, and in our judgment, has been a major shortfall in implementation efforts

since 1966.

Safety Emphasis Programs -- Demonstrated benefits of safety improvements in physical highway facilities prompted Congress to authorize six new categorical programs in the 1973 Highway Safety Act. For the three years covered by the Act, the authorized annual funding for all these programs averaged \$383.3 million.

However, there are substantial differences in the kinds of improvements the various states need most. The categorical approach has proved a hindrance to achievement. We recommend combining the separate safety construction categories into a single roadway-related safety improvement program. This change, plus a long-term commitment of Federal funding would make the work of state and local governments far more effective.

To summarize our views on the role of the Federal government in highway safety, we recommend that Congress:

- continue and expand Federal leadership and funding,
- specifically increase Federal funding for the Section 402 state and community safety grant program by an annual increase of 10 percent through 1980,
- require that short and long term goals be established for each safety standard area,
- increase emphasis on safety manpower training, particularly in local safety program management,
- combine all highway safety construction improvement categories into a single roadway-related program,
- provide a long term commitment of Federal funding for highway safety construction as part of an emphasis on crash prevention -- as well as to help mitigate the effects of accidents.

Research and Traffic Management

The Federal government has increasingly been in the forefront in conceiving and perfecting better solutions to national transportation problems through research and development.

The current era of reduced and more expensive energy supply, inflation and environmental concerns demands even greater national emphasis on R and D. It is essential that we extract the last ounce of safe service from our existing road and street systems. Coordinated Federal-state programs in transportation management to improve vehicle use in terms of loads carried, and to increase efficiency of the system in terms of capacity and quality of traffic flow, should be conceived nationally and proven through an aggressive demonstration program.

In urban areas, where there is the greatest need for increased transportation management, action is needed in the following program areas:

- incentives leading to more ride sharing,
- improved traffic flow and
- maintenance of system capacity.

In the first program area, public agencies, working cooperatively with private groups, can facilitate carpool and bus travel by providing exclusive lanes on freeways and arterials, and priority access to freeways. Public and private agencies

also can develop fringe parking lots and other support facilities for express bus operations. Promotion of car and vanpools is another important contribution.

State and local activities to improve traffic flow can be as simple as peak-hour parking prohibitions on arterial streets and as complex as installation of computer-controlled, traffic-responsive signal systems.

Two traffic management activities that increase the capacity of highway systems are:

- land use and site development controls and
- regulation of construction, maintenance and repair work on streets and highways.

Although the implementation of these transportation management activities is a state and local responsibility, Federal leadership will encourage and support local projects and programs. Federally-sponsored research can develop information to improve operational techniques and administrative organizations. Federal funding of demonstration programs can be an incentive for increased and improved state and local programs. Federal overview is needed to monitor program effectiveness. Dispersed Federal activities now going forward in these areas should be pulled together into a single, coordinated, continuing program.

Research findings in highway design, construction, maintenance and operations have been significant in the continuing improvement of highway transportation safety and efficiency. The highway transportation field has, with Federal support, developed a fine

system of communicating research findings to operating agencies where they can be put to work.

In recent years, the growing complexity of highway development problems has required more emphasis on research, planning and implementation at the Federal level.

With administrative direction and limited but stable funding, these research programs have provided the information needed to correct many problems. Many of the improvements in highway design and roadway fixtures, such as breakaway light poles, were developed through these programs. The techniques and control equipment to improve traffic flow on freeways and arterial streets were developed. Research in construction and maintenance has been equally productive.

For continuing effectiveness, the Federal research program should have appropriately increased funding for the next 10 years. The use of these funds should permit Federal support for research and large scale demonstration projects in all aspects of highway safety and traffic operations.

In particular, we recommend that Congress provide a method whereby an appropriate proportion of research funds of the various modal agencies will be combined in the search for urban transportation solutions which overcome the limitations each existing transportation mode has in meeting the current and emerging needs of society.

In summary, we recommend that:

- research and demonstration be expanded and concentrated on management methods to improve the productivity and safety of existing streets and highways,

-- intermodal research funding be established to lead the search for better urban transportation approaches.

Improved Intergovernmental Relations

Some 23 basic steps, plus a great many minor ones, are involved in bringing a Federal-aid highway project from preliminary planning to completion. The process usually requires four to eight years, and often longer. Meanwhile costs escalate. Whether the benefits are worth all these procedural complexities should be carefully weighed. Varying legal interpretations should be clarified and Federal laws and regulations which may create unanticipated conflicts and confusion should be reconciled.

Among such legislative actions are those relating to the National Environmental Policy Act, the Clean Air Act, the Federal Water Pollution Control Act, the Uniform Relocation Assistance and Land Acquisition Policies Act, the Highway Safety Act, Title 33, USC, Chapter 11 on Bridges Over Navigable Waters, the Administrative Procedure Act, the Davis-Bacon Act, the Department of Transportation Act, the Urban Mass Transportation Assistance Act, and the Federal-Aid Highway Act itself. These and others spawn agencies and directives that greatly increase administrative costs of the Federal government, and of state and local governments as well.

We suggest that this Committee initiate promptly a comprehensive analysis of the many requirements of various laws, regulations, and agency directives (including their effect on state and

local levels) which bear on highway modernization, in order to determine a balance between many kinds of escalating expectations and the importance of an economical, effective highway program.

Another urgent need is assurance that the new Budget Control and Impoundment Act will permit continuation of the advance contract authority, which is vital to planning and organizing highway improvements in the states, and which is provided in the Federal-Aid Highway Act. We recommend that Congress specifically assure that such advance contract authority continues to be accorded the states in any future highway program it might devise.

The amount of involvement by Federal officials in the daily routine of obtaining highway project approval and work completion should be minimized. One solution would be to grant Federal funds on a revenue-sharing basis with little or no direct Federal control or involvement. Oversight reports could evaluate the appropriate use of the funds. However, we believe that this -- while done with general revenue sharing funds -- would not serve the highway taxpayers' best interests, might not be sufficiently responsive to Congressional intent, and would abdicate the Federal executive leadership that has proved generally beneficial.

Clearly, the Certification Acceptance program, adopted by Congress in the 1973 Federal-Aid Highway Act, has failed -- partly because of the obligations for meeting all Federal laws

that must be assumed by any state requesting Certification Acceptance.

We believe that the states should be permitted authority to make detailed decisions. In order to protect the Federal interest, we urge that Federal survey teams serve as advisors and judges of state compliance with Federal mandates. Deferral of some Federal funds could be set as a penalty for those states which materially depart from good practice, until such time as substantial improvements are shown.

This practice would be little different from early Federal-Aid Highway Act provisions, which required -- as a condition for continued receipts of funds -- that states develop state highway organizations and that roads on which Federal funds were used be adequately maintained. Failures to comply were soon resolved with good results, and without day-to-day supervision by Federal agencies.

To summarize our views on the need for and methods of improved intergovernmental relations, we urge Congress to:

- initiate a comprehensive analysis of all the Federal legislative and executive requirements necessary to achieve a highway improvement with Federal funds,
- insure that existing advance contract authority will be maintained,
- revise legislation to eliminate the detailed procedures of the Federal Highway Administration in its relations with states, substituting Federal

survey teams to serve as judges of the general highway program quality and compliance with Federal mandates.

The Highway Trust Fund

An essential part of the Federal responsibility in transportation is financial and we believe that an orderly method of relating expenditure to benefit is critical; therefore, we strongly recommend the continuation of the Highway Trust Fund as a source of funding only for Federal-aid highway-related programs.

The practice of user fees levied and kept distinct from general tax revenues is an appropriate way to distribute the costs of governmental programs equitably and in relation to benefits. Although this principle cannot be applied to all governmental activities, it is widely applied in the Federal financial structure today: in boating, national park fees, migratory bird programs, air travel, to name a few. It is inherent to utility pricing.

More than half the states dedicate their highway user tax revenues to highway-related purposes by Constitutional amendments. Most of the remaining states have adopted similar statutes covering all, or nearly all highway user tax revenues.

The state provisions, and the Federal Highway Trust Fund as well, show that people are willing to pay special user fees on assurance that these fees will be applied to highway purposes.

The user fee concept can be destroyed, however, when it is used as a subterfuge to single out one group of citizens to bear the costs of programs designed to benefit others. Applied this way, the power to tax becomes the power to victimize.

The Highway Trust Fund presents other than equity advantages. It permits the long range, systematic planning and development so vital to a multi-phased public works program.

The probable long term energy shortage and conservation requirements increase the need to continue the Highway Trust Fund. Its potentially reduced income level is reasonably predictable. Income lags far behind needs. As long as the tax receipts allocated to the Fund are channelled exclusively to highway-related purposes, state and local plans can go forward.

The Highway Trust Fund's full income should be authorized for extended periods in advance and used as rapidly as available. Needs are great; delay in allowing obligations within anticipated income subverts the purpose for which the Fund was established.

Uses of the Trust Fund revenues include many with environmental and aesthetic impact, benefits to displaced persons and businesses, safety programs, citizen participation in planning, and features to aid public mass transportation. These activities, too, are at the mercy of decisions made on the Federal-aid highway program.

A proposal often mentioned would substitute a single

"Transportation Trust Fund," for the Highway Trust Fund.

Proponents of this substitution appear to have in mind a one-way street. Highway and airline users would be financing other activities from which they receive little or no unique benefit, at a time when their own specific requirements are great and user tax income is declining. It is our conviction that the national need for a strong, integrated transportation network would be badly served by efforts to rob Peter to pay Paul. The prospect of equitable user fees should have first consideration for all transportation programs, and to the extent that supplemental public support is justified, this support should be provided from general funds.

We urge Congress to:

- continue the Highway Trust Fund as a source of funding only for Federal-aid highway related programs,
- authorize the full income of the Trust Fund for extended periods in advance.

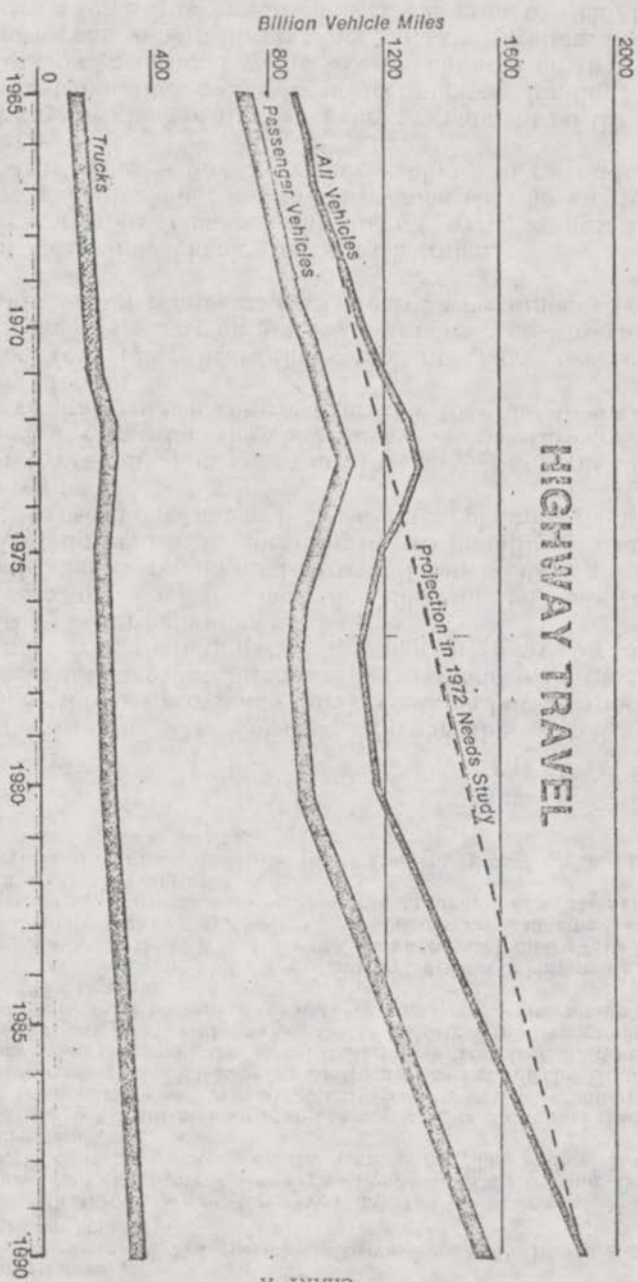


CHART A

UNITED FRESH FRUIT AND VEGETABLE ASSOCIATION,
Washington, D.C., July 30, 1975.

HON. LLOYD BENTSEN,
Chairman, Subcommittee on Transportation, Committee on Public Works, U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: We have received and read the statement of Peter G. Koltnow, president, Highway Users Federation, submitted to your Committee on July 24, 1975, in connection with the hearings on "The Federal Role in the Highway Program".

The United Fresh Fruit and Vegetable Association is a national trade association with headquarters at 1019 Nineteenth Street, N.W., Washington, D.C. 20036, having more than 2500 member companies throughout the United States who are engaged in the production and distribution of fresh fruits and vegetables, as well as providing goods and services to the industry. In the aggregate, they handle approximately 75 percent of the nation's tonnage of commercially produced fresh fruits and vegetables.

Approximately 75 percent of all fresh fruit and vegetable shipments move to market by motor carrier. We, therefore, have a vital interest in a sound, safe, and adequate highway system. We particularly are concerned about the growing need for the improvement of rural roads throughout all of the agricultural producing areas in the country.

We endorse and support Mr. Koltnow's statement. Please make this letter a part of the record in these hearings.

Sincerely,

DURWARD SEALS,
Vice President.

Senator DOMENICI. Mr. Koltnow, in your abbreviated remarks, you said passthrough provisions should continue but with more flexibility to take into account differences between and within the States.

Are you referring there to particularly more flexibility for the urban areas on the passthrough money?

Mr. KOLTNOW. I refer to more flexibility for the States to move that passthrough money around so that it can be used quickly and will not be hampered in its spending by the inability of one city to get enough to use at one time or because certain planning requirements haven't been met.

Senator DOMENICI. You are aware that the cities seem to have a complaint that even when they have moneys to passthrough that the States have pretty much control over how they use it anyway, by hook or by crook?

Mr. KOLTNOW. I have heard that complaint. I have never seen what it really looks like when you get down to it on a case-by-case basis. I think that sort of complaint always exists where money is handed down.

Senator DOMENICI. Thank you, Mr. Chairman.

Senator STAFFORD. This Senator doesn't want to put words in Mr. Arrow's mouth, but I got the impression that he was telling us that the trust fund is now very much subject to restraints on his expenditures.

Would any members of the panel care to comment on the position that the trust fund does not really protect highway funding?

Mr. JOHNSON. Senator, I would like to comment on that. I think that I can respond to both the statement and the question. I think the highway trust fund, if it were used as it was prior to 1966, let's say before impoundment started, that it does provide a great deal of stability in the highway program.

The States know how to plan. They know within a reasonable limit the funds that can be expected and consequently are able to conduct a much more efficient program.

So I think the highway trust fund is a stabilizing factor and as has been pointed out here several times, overall it is inadequate for all the highway needs.

At the same time, none of us here today that I have heard are advocating increasing the tax base.

Senator STAFFORD. Does anyone else care to comment? If not, we will go on to the next question.

There have been suggestions that the trust fund be established to finance all Federal contributions to surface transportation. Revenues will come from taxes on fuel and freight. The disbursements would be made to various modes according to national priorities, not contributions to the fund.

Would any of the panel members care to give the committee their reaction to this proposal?

Mr. CIANCHETTE. You are making a reference to single trust fund for all modes of transportation. I think we support the continuation of a highway trust fund and a separate trust fund for mass transit. We will support funding that in some fashion, but probably where it is for the general good, as some of the revenue should come from the general fund, possibly taxes, fare taxes, things of this nature, and possibly fuel taxes of the equipment that is using fuel.

We definitely feel it should be a separate fund—airports and mass transit.

Mr. DE LORENZI. Where would the money come from in addition to the motorists? Would it still mostly be coming the way it is coming to the trust fund?

Senator STAFFORD. This is not a proposition necessarily supported by this Senator.

Mr. DE LORENZI. I am just trying to clarify it.

Senator STAFFORD. Some might be derived from some sort of a levy on the movement of freight. If there is no further comment—

Mr. ARROW. I think it raises as many problems as it seeks to solve. You keep the distribution of money by mode. That seems to be the thing that is causing all of the—the decisionmaking at the local level, that was the very thing the Congress was trying to get at in the urbanized areas when it passed the Muskie-Baker provision in 1973.

Senator STAFFORD. Thank you, Senator Domenici?

Senator DOMENICI. Would the other witnesses care to comment with reference to Mr. Koltnow's summary of how he would reduce the number of categorical grants? I think he very specifically recommended, and perhaps you could help me with the exact place that you said that, the six categories, I believe you said.

Mr. KOLTNOW. Five. I believe that is on page 5; two-thirds of the way down.

Senator DOMENICI. To simplify Federal-aid procedures, we urge limiting the number of Federal-aid categories to five; interstate, primary, rural and urban, rural secondary, and safety, about which you comment separately. Would any of the other witnesses like to comment on that?

Mr. ARROW. We would back the proposition contained by both the administration and Senators Kennedy and Weicker in their bill, that there are four systems needed, the interstate, urban, rural, and the safety program.

Senator DOMENICI. Interstate?

Mr. ARROW. Urban, rural, and safety.

Senator DOMENICI. Do we have any comments from the other witnesses?

Mr. DE LORENZI. Yes; we would be the urban, the rural and the interstate, and the bridge safety program.

Mr. CIANCHETTE. I think we would recommend an off-system category, also.

Mr. JOHNSON. ARBA, I would say, is certainly in general, if not precise accord with the Highway Users Federation. ARBA does feel rather strongly that there should be some provision for helping the local jurisdictions with off-system bridges and bridge approaches.

Senator DOMENICI. Assuming we were to maintain some significant integrity of the trust fund and some priorities, certainly a mandate that the Interstate be completed, I would like the four of you to comment on the statement made by Mr. Arrow where he described that the 1962 act mandated the cities of America to come up with the comprehensive plan, but up to this point, we have not required that the States do that; yet, we are funneling most of our money through the State highway departments or the like, or the State highway commissions.

Do any of you have any viewpoints on whether or not we ought to consider making that requirement at the State level? I might preface my remarks so you will understand, I have been not all the way around the country, but I have been to four or five cities where we heard commissioners from other States. I need not hide that I am somewhat appalled when I hear commissioners from certain States talk about the fact that they are in charge of all transportation, all right, but they seem to confuse the fact that the highway trust fund is for highways, but that they have some responsibility in mass transit and others as part of the system manager.

I find a number of major cities in the country where they are not doing a thing to come up with a comprehensive plan and I sometimes think it is out of fear that they are afraid that the highway trust fund responsibility they have got is going to be confused. But their role isn't going to go away. Somebody has got to be doing overall planning in terms of different modes of transportation.

You mandated it on the cities in 1962 and I was part of the city that tried to implement that monstrosity. Looking back on it, I am glad they forced someone to do it. We have some urban statistics and some projections. I don't see the mandate on the States and I don't see them moving very rapidly to do it. I think it is an excellent suggestion from the standpoint of looking at it in terms of the future and the need for alternate kinds of systems other than roadways.

Again, you can preface your remarks by whatever you would like so long as we maintain the integrity of the trust fund, and build the interstate. I am just talking about the comprehensive planning mandate for transportation being given to each State if they are to continue to be the major agency to which we provide funds.

I would like your views on that. If none of you care to, it is all right.

Mr. KOLTNOW. As a practical matter, a great deal of comprehensive planning goes on at the State level simply because it has to go on. Whether it needs to be mandated or not is something else again.

As I think Mr. Arrow points out in his longer testimony, there is a trend toward State departments of transportation, and not only is transportation planning part of their mandate, but they do a great deal of coordination with all other branches of government which have a reasonable interest in what they are doing.

I think the most progressive States have for a long time worked very hard to integrate highway planning with other forms of transportation planning and to the greatest extent possible with State land use planning. It may well be that some of the problem has not been the unwillingness of State transportation planners to work together, but the fact that the concept of land use planning at the State level is one that is not universally applauded yet.

Senator DOMENICI. Any other comments?

Mr. JOHNSON. If I understand your question correctly, Senator, it is whether or not the States should be required to develop transportation plans in addition to such plans for cities or populations of 50,000 or more.

Senator DOMENICI. That is right.

Mr. JOHNSON. I certainly subscribe to good planning. I don't know that ARBA has taken a position on that. This has to be a personal opinion. I think most States, possibly on a more informal basis than you have in mind to do, could do such planning.

I will confess, too, that I suspect, statewide, that most States do not work up such plans for all modes. This is something that could be added into that planning process. I am like you to a certain extent. I was in a State at the time the 1962 act was passed and was directly involved in getting started with several cities on the planning process.

As with anything new, it was rather difficult to get started. But I think after it was started, that everyone saw it as the good thing that it is. Certainly, any plan like that has to be updated at regular intervals because changes continue to occur.

Mr. CIANCHETTE. I will have to speak on what I know and I know a little bit about the State of Maine. They do have a department of transportation that is all inclusive, with all modes of transportation. I think they certainly do have a planning department that is working real hard at attempting to balance the transportation needs of the State of Maine. I feel they are doing a good job in that area.

Senator DOMENICI. Any others?

One of the witnesses, I guess it was the first witness, in his explanation of things we had to do, used the word decentralized. Who was it that used that?

Mr. JOHNSON. I did, sir.

Senator DOMENICI. That one of the things we have to do is decentralize and then you went on to talk about what we ought to decentralize. Do any of you have any different opinions on that in terms of the long-term future of America?

You all heard what he is talking about in terms of decentralizing where industry is, where jobs are, where they locate. I assume you

would have to agree that that meant where people live. I assume that is based on some kind of philosophy, there is a better way to live than cramming them up in big cities. Is that right?

Mr. JOHNSON. Yes, sir. I think the way the American people live speaks for itself in that respect. People have as they were able moved to the suburbs and so forth. Therefore, it seems reasonable that if decentralization goes on, that the industry and it is doing it now to some extent, decentralizes likewise. The jobs are closer to where the people live, so that then reduces the travel that is necessary to and from work.

Mr. DE LORENZI. I am not sure it reduces the amount of travel to and from work, if I may inject myself there. This is a reality. This is a continuing situation that is going on at an increasing rate, no matter what we want to do or legislate. This is what the people are actually doing.

That shows up in all of the census reports, the Bureau of Census journeys to work study, and things like that. I think that is a reality we have to deal with. Here is the situation, not as some planner would like it to be and we should try to base our decisions on what is the reality.

Mr. ARROW. Senator, I would suggest that the idea that suburbanization is an actual decentralizing of the population is true, if you are looking at the United States as noninterconnected metropolitan areas. In fact, the decentralization that is represented by suburbanization is actually the fact that more people have been moving into metropolitan areas.

If you want to look at the trend of decentralizing the society, you are talking about reversing the flow of people from rural to urban areas. In that situation, using the transportation system to achieve that, we do not think is a good idea because it is going to happen as a result of shifts in transportation costs.

It happens every time the ICC restructures the railroad industry. It is going to continue to happen that way. I for one simply don't know how to fine tune the economy to produce a transportation system, but you can deal with the transportation system to influence the economy.

Senator DOMENICI. I just want to make sure that you expanded on it a bit, because I think you must know that this committee already, in just a few days of testimony, has certainly had some very distinguished people say the exact opposite in terms of the future energy needs of the country and travel time.

They would also agree with you that the freedom that the American people have, certainly doesn't mean that if you build a plant out in the country, that the fellow who works there is going to live by it. Quite to the contrary, he may live at the other side of the county and drive all the way over there. I don't know whether we can do anything about that. But I think there are two divergent views in the country.

You also mentioned that we ought to do more about carpooling. I was the first one to introduce a bill to get it in here on a demonstration basis, to see if we could do something about it.

But I really wonder, if any of you have any real ideas on how we can get it done, unless it be the marketplace cost of a car. That might end up doing it. There are those that say even that won't do it. I

would like to hear some views on how we are going to get people to do that. We aren't doing it very much.

Mr. KOLTNOW. If I may respond to that, we have been doing something about it for about a year and a half starting with a series of meetings around the country, bringing together large employers to stimulate interest in the subject; and second, to help them do it. The response to that was so good; we are now involved in a contract with the Department of Transportation in which we communicate directly with the presidents and heads of personnel departments of the 72,000 largest employers in the United States, along much the same lines, first of all, to convince them it is a good thing to do; second, to help them do it.

I think the response is very good. The potential of carpooling is kind of astonishing. It is one of those cheap, simple things that everybody knows about and it is so cheap and so simple that its potential for energy reduction is sometimes overlooked.

It is the single, cheapest, quick thing we can do to conserve.

Let me give you some examples of what can be done.

One is General Dynamics in St. Louis. In 1973, they had an average car occupancy of 1.3 among their employees. A year later after the program was put into effect, it was about 1.85. The 3M Co. in St. Paul rather tentatively embarked upon vanpooling 3 years ago with six vans. They now operate something like 68 vans at an employment site of 9,000 employees and they have a waiting list of close to 1,000 people waiting to get into their vanpool program.

The single, largest stimulus is not patriotism, but cost; and the second is convenience; the ability to get a preferred parking place.

But we are convinced that not only the ordinary carpool, but special versions of that, whether they are vanpools or buspools, such as are operated by GEICO out here in the Bethesda area, hold a great deal of potential.

However, there is no one conservation technique that in itself will significantly reduce our reliance on petroleum energy. We have to use every little thing we have in sight, even though it is something that only provides one-tenth of 1 percent. That is important. It is a lot of barrels of oil.

Senator DOMENICI. What about Triple A? Do you have any views on that?

Mr. DE LORENZI. Yes. We have supported this program and have been very active in supporting carpooling in many sections of the country. We think there are many things that can be done. As an example, here on Highway 95, the restricted bus lane won't allow you in unless you have four people in your car pool. That is difficult.

You usually have to have a pool of six people to make sure you are going to have four in your car every day. If they reduced that entry requirement by one, they would probably get a lot more people carpooling. It is quite easy to get three people together. That is a very simple thing that could be done.

Senator DOMENICI. They are pushing so hard for the manufacturers to make little cars, we may not have carpooling very long anyway.

Mr. DE LORENZI. They may, if they get the entry requirement down to two.

Mr. ARROW. Carpooling has sort of become the motherhood and apple pie issue of transportation. Everybody is in favor of it. We are, too.

We think that everything should be, that can be done to encourage people, but I think carpooling is one of those things that illustrates the fact that when you are talking about your urban commuting, how people get from home to work, it is really a question of how the Government is going to bias your personal preference to get you to do one thing or another.

In that respect the only thing we can do in this type of society is encourage what we feel is desirable and discourage that which we feel is not.

The methods are usually limited to incentive ones. Whatever carpooling will do, it will do that part of it. But again, I agree we can't rely on it.

Mr. DE LORENZI. There may be a big boost to that when the EPA puts in its transportation control strategies in many cities where, they are threatening to reduce parking areas, in-building parking, and things of that nature. Boston, as you know, is the first city, with a plan approved, but it really hasn't gone into effect yet.

Then there are other factors. I think you may see a trend towards carpooling, if there is a reduction in the parking places. In regard to that, we received a letter the other day from a Government agency which is moving in this direction of making transportation controls asking our help in making suggestions, reducing parking facilities and all of this type of thing.

We queried them and asked them whom they had sent this letter to. They had sent it to 700 corporations and industries in the Washington metropolitan area.

Then we asked the obvious question. We said, did you send it to the Federal Government which employs most people in the area? They had not. We think the Federal Government should be involved in this, too.

Senator DOMENICI. Who did that again?

Mr. DE LORENZI. That is an unnamed agency.

Senator DOMENICI. Was it Federal?

Mr. DE LORENZI. It is Federal.

Senator DOMENICI. I am really not sure on the last comment, but I think the Federal Government has been ahead on carpooling. It just may be that they already have a program in.

Mr. DE LORENZI. I am not talking about carpooling. I am talking about the transportation control strategy. It has to be coordinated with the private sector and also with the Government at the same time. That is the point I am really making.

Senator DOMENICI. Mr. Johnson, you recommended that the highway trust fund be maintained and you also recommend that there be an actual outlay and appropriation of \$5 billion for the interstate program itself.

Projections of the trust fund revenues that we have got suggest that about \$6 billion to \$6.5 billion will be realized annually for the next several years. How do you propose that we finance a Federal highway program of the magnitude that you are suggesting?

Mr. JOHNSON. In my opinion, Senator, if the trust fund is extended indefinitely, as we advocate, with the money that has been impounded, for several years there could be an \$8 billion or \$9 billion, program. This could be financed with the trust fund by utilizing in effect some of the money that has been impounded.

There would come a day of reckoning, I realize that, where you would have to get back on a current basis, and the trust fund would have to be in balance as of a certain date.

Senator DOMENICI. So that that \$7-plus billion that we have unimpounded but that we know can't be spent this year, you are talking about spreading it over the next few years so that we would have \$5 billion in the Interstate?

Mr. JOHNSON. That is right, Senator.

Senator DOMENICI. That may be 5 years, it may be 4, it may be 6?

Mr. JOHNSON. That is correct.

Senator, may I add one thing, if you don't mind, getting back to this decentralization?

I may have put the wrong connotation on it. But that statement was made in connection with several current needs that we cited. As ARBA stated, it is that we need to decentralize population and industry, rebuilding economic growth centers in areas where the economy is lagging, which is already part of the highway program.

Mr. CIANCHETTE. Senator, I might mention on the \$5 billion fund for the Interstate System, as Mr. Arrow mentioned before, somebody has to determine when this system is going to be completed, and the \$5 billion, the projections, I guess it will be 1990 at the 7-percent inflation rate before that will be completed.

I think at the level the highways in this country are deteriorating, 50 percent faster than they are being constructed, I feel the levels going into the highway trust fund should probably be increased. There is not adequate revenue, you are saying, to do the job that needs to be done to replace the bridges and reconstruct the highways and keep them from deteriorating at the level they are now. It is going to take increased revenue to do it.

Senator DOMENICI. I just want to ask a couple more questions and get your observations on them.

In the few days of hearings we have found, and I am sure the staff knew, but we had witnesses tell us that in the area of rural transportation, aside from roadbuilding, that there are 35 different programs being banded about controlled by maybe five different agencies of the Federal Government, all of which spend some money on rural transportation, all within the confines of the genesis of their authority. For example, Head Start, if it is in rural areas, transports. Head Start and nobody else.

Under the Older Americans Act, they appropriate some of their funds for some vans and the like, but they only can take old people to their Meals on Wheels and maybe drive them to the house and deliver the lunch program. The community action program has put some of their money in transportation for maybe the elderly or very poor into a community center.

Do you have any thoughts as to how we ought to at least accelerate the coordination of that kind of program where we spend the money for transportation in those kind of areas rather than the way we are doing it? I would say you have addressed it in your intergovernmental section.

Mr. ARROW. The coordination obviously has to take place somewhere. The idea that the transportation money for those particular types of programs ought to be under the budget of the agencies administering those programs, I don't see how we are going to get around that.

But perhaps the way to do it is simply to provide the availability of some type of planning funds, either through the programs generated by the Department of Transportation or through a combination of the other programs who are actually paying for the services so that there can be a mechanism for those people to integrate it and coordinate it locally. I don't see any reason why that has to come beyond that point.

Obviously the idea is you want to get some sort of coordination going so the left hand knows what the right hand is doing.

One of our complaints is there is nobody looking from other than their own arm. They are all running around in the same direction.

Senator DOMENICI. One last question, and I don't know if our chairman has any or not, but last year when we were pushing for the release of impounded funds to stimulate the economy, we were talking about all kinds of new programs, and some of us said, why don't we take a look at some of those that are already in being? It had nothing to do with prioritizing anything, but we had the money there and a lot of unemployed people, and we were looking for a dollar to job ratio.

We had some testimony as to what \$1 billion in highway funds produced in employment, directly and indirectly. The figures given at that time by the Department of Transportation when they finally came around on their own saying we ought to release a couple of billion dollars.

It was rather startling to us. I would like to know if anyone has any current estimates of the direct and indirect jobs that come from \$1 billion or an increment of \$1 billion in highway moneys.

Mr. JOHNSON. Senator, if I may respond to that question, on page 12 of the burgundy-covered book, ARBA made a survey through its contractors division. In effect, I would say that we substantiated the figures that the Federal Highway Administration had developed for onsite employment.

ARBA was not able to develop any figures on ancillary jobs, and so forth.

Senator DOMENICI. Onsite, direct?

Mr. JOHNSON. On site; these are direct jobs; yes, sir.

Senator DOMENICI. I can't extrapolate from that chart that quickly. What is it per \$1 billion?

Mr. JOHNSON. We came out with 23,290 onsite jobs for each \$1 billion, which compares with the Federal Highway Administration 26,000 onsite jobs. Perhaps I should read this one brief paragraph:

"To test the validity of this estimate, ARBA conducted a survey of its almost 2,200 contractor members. We asked them to report the total dollar value of their highway work in 1974 and the average number of employees. More than 700 contractors responded. Their responses indicated an average of 23,290 onsite jobs for each \$1 billion of highway work. The correlation between the ARBA figures and the FHWA figures is reasonably close."

I was going to add one further comment here: that naturally, in response to a questionnaire like this, most of the respondents I would guess would be the larger contractors who had better record keeping

and reporting facilities, whereas the smaller contractors are probably the ones who use more onsite labor.

So it is a reasonable assumption, I think, that this figure, if anything, is a little low.

Senator DOMENICI. Mr. Chairman, I have no further questions.

Senator RANDOLPH. Thank you, Senator Domenici.

I want to refer, Mr. Arrow, to a comment you made today. As you spoke of the trust fund you said that the highway trust is not needed anymore. I think I heard you say anymore.

Mr. ARROW. I did intend to use the phrase. If I did not, our position is that the highway trust fund is not needed anymore.

Senator RANDOLPH. I believe that it is important to keep the record as nearly correct in what we are saying. You indicated, if I heard you right, that the highway trust fund is for interstate road construction, and let it go at that?

Mr. ARROW. I was referring in terms to the administration bill. I did not mean to infer that that is actually what it did now. I was saying that we couldn't even see the validity of maintaining it only for the purpose of the Interstate System. Should the committee accept the administration's plan?

Senator RANDOLPH. In the highway trust fund that money, for example, is being used not only for the interstate, but for the primary rural roads; the secondary rural roads, the urban system, the urban extension system, the urban high-density system, the priority primary system, the economic growth system, the forest highway system, the public land highway system, the territorial road system, the Alaskan assistance system, the Great River Road, and others. On the railroad crossing, and our rural bus demonstration programs two-thirds of the funding, is from the trust fund.

Senator DOMENICI. Mr. Chairman, could I interrupt and just tell you I have to go to the clear air markup and would you hold me excused?

Senator RANDOLPH. I won't hold you accountable, but you know that. Thank you very much, Pete, for being here.

Side board control, bridge replacement, rail highway crossings, pavement marking demonstrations, are also trust fund financed.

Proper signing of roadways is another problem. We are up on them before they tell you what to do. This causes accidents, regardless if the road is Interstate or another type. I get worked up, over signing. Let's say you come to Rosslyn. Say you are coming off of the Canal Road. You are crossing Key Bridge. You come over and make the little circle and then you come out and you come to a place where you are going to turn left to come east, to come to the airport.

Do you think there is a sign that shows you to turn left to go to the Washington National Airport? No; there is no sign anywhere crossing the bridge after you turn around, after you get up to where you actually have to turn. There is no sign.

You then turn left and you proceed east and there are large signs and one of them says Washington to the left. Do you think that on the one you are supposed to be on, the one to the right, that the Washington National Airport is there? It is absolutely not there. You know, I am not sure who is responsible always, whether Virginia or the Park Service, or whatnot.

I am not going to be too definitive at the moment. But do you realize that people, very frankly, going to meet people who are arriving by plane or departing themselves, lose minutes that are very important to them. Confusion is caused by the lack of signs and signs that are so close to where you make the decision that oftentimes you react on impulse to slow up and an accident occurs.

Who, in this group, will undertake this job. I am unable to get them to act.

This may seem like a minor matter, but year after year, we talk about signing, and the placement of signs, and nothing is ever done about it.

So when we are talking about this subject of pavement marking and high-hazard locations and roadside obstacles and safer roads programs, all of them are out of the highway trust fund, Mr. Arrow.

There are many programs, most of them with substance and very important, that are a part of the funding that comes from the highway trust money.

I will hurry along.

Mr. de Lorenzi and Mr. Johnson, the American Automobile Association, and the ARBA. I think you both indicated that a category for special bridge replacement needs to be retained. However, in our rural hearing last month, Monday, we received, I would say, less than an enthusiastic response from the county engineers who have the majority of the Nation's critically deficient structures on the systems for which they are responsible.

I didn't get very much in the way of plus. Also, we have received no request for continuation of this program which I believe in strongly from AASHTO representatives today.

So do you want to comment on it?

Mr. DE LORENZI. We think it is vital. We think it is absolutely vital. That is the reason we support only four categories for the highway trust fund. What are they going to do? Have another Silver Bridge fall before we get their attention?

Senator RANDOLPH. I hope not.

Mr. DE LORENZI. I hope not.

Senator RANDOLPH. The special bridge replacement program has been a priority with me. I cannot understand why we can't have the stressing of this.

Mr. JOHNSON. We feel very strongly about that; we recognize that the counties are not always capable of doing that kind of work as fast as they should.

The thing about a bridge is, as you are well aware of and all of us are, that it is a life-and-death matter. If it fails—you can get a pothole in the pavement and not necessarily kill a person—we however, we feel bridges or bridge replacement is vital to the highway system.

Senator RANDOLPH. Then generally you gentlemen feel that this is a good provision that we are talking about, and we should place proper emphasis on it?

Mr. Johnson, Mr. Koltnow, from information that I have received in your statements, it is understandable to me that you feel maintenance should not be federally financed. We hear testimony that it should be.

I am not sure that it is true that the FHWA has relaxed its administrative regulations on the definition of construction to include many maintenance-type activities.

Would you oppose the program, the Federal commitment to maintenance activities, to use that quote, on an interstate system if the system is complete?

Do you oppose the expansion of the definition of maintenance to include resurfacing?

The Administration, I know, has suggested the latter. Do you have any comment?

Mr. KOLTNOW. Mr. Chairman, as far as I know, there has been a change in the Federal regulation's definition of construction and maintenance as regards interstates and in effect the definition has been relaxed so that some measures that might at one time have been called maintenance are now called construction.

This consists of fairly large overlays of pavement to bring pavement sections up to modern standards and so forth.

This kind of reconstruction makes sense to us—but typical maintenance as a Federal responsibility does not at this time.

Senator RANDOLPH. Are there other comments?

Mr. JOHNSON. Senator, I would like to comment on that, sir. As I understand the situation with the Federal Highway Administration, the resurfacing of a road, let's say something significantly better, on the Interstate System on a 90-to-10 basis can only be done on those roads designed prior to October 1963 which was the 1975 design date.

The ruling that I understand the FHWA has come from the Comptroller General and is that such resurfacing at 90-to-10 cannot be done on the Interstate System. Therefore, FHWA, as I understand it, feels that the law must be changed to revise the definition of construction and ARBA advocates such a change in the definition.

Senator RANDOLPH. Thank you.

Any other comment?

Mr. ARROW. I think this may be the only thing on which Mr. Koltnow and I agree. I don't think that maintenance should be part of it. We have heard from people in correspondence with us and again this is hearsay and I will not make it an official allegation, that many roads are undermaintained solely for the purpose of allowing them to deteriorate to the point where Federal money can be gotten for reconstructing them.

Senator RANDOLPH. To me, that would be unconscionable.

Mr. ARROW. I am not going to accuse anybody in particular, but we have had people call up and say this is what they are doing.

Senator RANDOLPH. I appreciate your commenting on it, making it a part of the record.

We had some people talking with us about the matter of the 1976 interstate apportionment and how many of the States have run out of the apportionment by the end of this calendar year. Of course, West Virginia has already completely exhausted its 1976 interstate apportionment.

Do you have any comment, any of you, on this question?

Mr. JOHNSON. I understand, Senator, that there are 12 States that have already exhausted their 1976 interstate apportionment.

Senator RANDOLPH. I believe that is a correct figure. What does this tell you?

Mr. JOHNSON. It says that they cannot let any more interstate contracts until some provision is made for them to receive more Federal-aid money or some advance funding of some type.

Senator RANDOLPH. There might have to be something in the interim action such as I believe last year or maybe the year before, 1973, in the Federal aid, we passed \$1.5 billion special funding for that very purpose so the continuity will not be jeopardized.

Mr. DE LORENZI. We think that those who are willing and able to do this should be able to go ahead with their building.

Senator RANDOLPH. To you gentlemen of the afternoon discussion, all of you, all those who have testified, I appreciate it. I speak also for the subcommittee chairman, Senator Bentsen, who could not be present. He did preside this morning, but there was difficulty in his scheduling which made it impossible for him to be here. He regreted it and asked that you be notified of the situation that kept him from hearing you.

I have been helped by your comments and your counseling. I want you to know that in the subcommittee and in the full committee, the viewpoints of people are not just heard, but we attempt to relate them one to another and to the job that we have to do.

I think this is very, very important. That is why so far as the work I do, hearings are scheduled to present us with different approaches to these problems given to us by a cross section of knowledgeable and responsible witnesses. I feel that is what we have done in these hearings.

How many have we had, Ric? This is the fifth of the hearings of nine. So we are going to close the hearings and those who have statements that would be desirable for the printed record may submit them. I think we have said that every day to give opportunity for those who may not have had the privilege of presenting formal statements.

So we thank you, gentlemen, and we will move along as expeditiously as we can keeping in mind the other legislative matters that are before us. Those are considerable in the Senate.

Thank you very much, We are very grateful.

[Whereupon, at 4:15 p.m., the subcommittee recessed, to reconvene at 9:30 a.m., Monday, July 28, 1975.]

FUTURE OF THE HIGHWAY PROGRAM

HIGHWAY SAFETY

MONDAY, JULY 28, 1975

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION,
Washington, D.C.

The subcommittee met at 9:30 a.m., pursuant to recess, in room 4200, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee), presiding.

Present: Senators Bensen, Stafford, and Domenici.

Senator STAFFORD [presiding]. Good morning. The committee will come to order.

This is another in a series of hearings by the Senate Transportation Subcommittee of the Public Works Committee looking forward to a highway bill.

This morning's hearings will deal with the subject of highway safety. The Chair will invite the witnesses who will present oral testimony—Dr. James Gregory, Mr. Art Delibert, Mr. Carlton Fisher, and Mr. Richard Peet—to come forward if they will, or as many of them as are here.

The others, on arrival, will be invited to come forward.

At the completion of all of the oral statements, which the Chair would request be limited to 15 minutes at most, the contributing panel members will be asked to join the others.

Senators on the subcommittee will address questions to individual panelists or to the panel as a whole. Witnesses should not feel that comments are limited to those specifically asked for, however.

We want to encourage any panelist who wishes to respond to a question or to a statement by another panelist to do so. We believe the resulting discussions will be more useful than the traditional question-and-answer format.

Gentlemen, we appreciate your being here. The Chair would be most grateful if you would summarize your written statements and try to do so in 10 or 15 minutes. The Chair will state now that without objection all of your statements will be placed in the record in full, so that they will appear as part of the record.

The Chair is going to invite Dr. James Gregory, Administrator, the National Highway Traffic Safety Administration, to lead off as this morning's witness. Dr. Gregory.

STATEMENT OF JAMES B. GREGORY, ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Dr. GREGORY. Thank you, Mr. Chairman. I appreciate the opportunity to come before this committee and discuss the progress and implementation of the Highway Safety Act of 1966. At the time the act was passed approximately 53,000 highway deaths were

recorded annually. At that time the fatality rate was 5.7 fatalities per 100 million vehicle miles and rising. It was clear that some national focus was indicated.

This is not in any way to say that States, communities, and private sector groups were not taking the problem seriously but that some added emphasis was required.

By 1973, good progress could be noted. The fatality rate that year was 4.3 and falling. In 1974 the estimated highway deaths were just over 45,000 or more than 9,000 below the previous year's toll. That, by the way, was the lowest toll since 1963.

These dramatic reductions, of course, were primarily attributed to the fact that there was an energy crisis and the 55-mile-per-hour speed limit was introduced.

I think sometimes we tend to forget, because of this dramatic fatality reduction last year when we had well over 100 million drivers doing something different, that the other Highway Safety Programs being carried out nationwide were also having an effect.

I think we have to give the State and local authorities every credit for their participation in the other programs that were being carried out by the Department of Transportation together with the States and communities. Of course, we also can't neglect the fact that the motor vehicles at the same time had been and, were being improved.

Senator STAFFORD. Mr. Gregory, we won't customarily interrupt, but did the lowered speed limits in 1974 have some role in the lower death toll?

Dr. GREGORY. I don't think there is any question about it, Mr. Chairman.

Although the reduction in travel was on the order of 4 or 5 percent, and that may be an outside figure, we were pretty close to a 20-percent reduction in fatalities. We were also getting about a 15-percent reduction in injuries.

This amounts to literally billions of dollars in savings of both lives and property.

Senator STAFFORD. We saved more than gasoline when we slow down to 55 miles an hour.

Dr. GREGORY. There is no question about that. I think it is important to note that even with the disappearance of long lines at service stations, there still has been a good deal of voluntary compliance with the 55-mile-per-hour speed limit. I think we have to give those States that have been serious about enforcement a good bit of credit, too.

In June of 1975 we recorded an historically low figure. We were actually down below 1974 by about a percent or so. We certainly can't be too complacent, but although this is a fragile record, I think it does show that with a reduction in driving and adherence to the 55-mile-per-hour limit, we are getting some results.

People will say that—well, people are really not driving 55, but what is happening is that, in large degree, the very high speeds have been eliminated. Those who were driving below 55 probably are still doing so. Therefore, we have on our highways a more uniform speed. Divergent speeds generally lead to more accidents.

That statement will allow me to skip a page or two. Thank you for your question.

We are working with the States in every way we can to have a fully national program. We are encouraged that new management systems have been set up in many of the States and that sophisticated planning and management has taken place.

In my view the contributions of the Highway Safety Program, the management, and the long-term reduction in the fatality rate would not have been possible without our national highway safety standards. The highway safety standards are used by the States as a basis for their safety programs.

However, I think that some changes need to be made in these standards. After all, they are nearly 10 years old. What we would like to do is revise the standards to be performance-oriented and to require that essential aspects of the standards be a part of any good, solid highway safety program.

I think we need the flexibility to segregate those so-called must items from optional items which the States might use for their individual problems.

Right now, due to legislative restrictions, we are unable to make revisions in these standards with any speed at all. The so-called Gray amendment requires that any changes in the standards be submitted to Congress for approval. I feel from a management standpoint, and the administration bill so reflects, that that is an unnecessary step at this time.

I believe that we could make changes, and very constructive changes, in the standards through our normal informal rulemaking procedures, which would, nonetheless, allow 120 days for normal congressional oversight and also give a full hearing to all experts in the fields, including those in the States and communities, with regard to the proposed changes in the standards.

Another criticism that the States have made regarding the standard concerns the requirement that every State fulfill every part of every standard. I think that with the new management look that I personally have been trying to give the highway safety program, it is important that States and communities zero in on the problems that exist and work on those problems for a maximum impact at the earliest possible time.

If we are too rigid in demanding that all parts of all standards be implemented by the calendar, I think perhaps we will miss one of the basic management principles—looking at particular problems and trying to impact those problems at an early time.

We have had some success stories as a result of this new management look. Nine States are looking at their total highway program from this solid management view; 12 of them are using problem identification and emphasis on problem areas instead of specific standard implementation.

And 33 of the States, according to our latest information, have developed specific objectives with respect to at least 1 program area that they feel will impact, what I keep calling the bottom line of highway safety; that is, fewer fatalities, injuries and accidents.

In order to stimulate this result-oriented type of project, we are requesting in the administration bill more flexibility for the Secretary whereby he can grant longer term waivers for specific parts of specific standards in order that the impact on the bottom line can be the greatest soonest.

There is some concern that this waiver provision might increase the time in which important standards might be implemented by the States. Under the proposed waiver, States would have to assure us and provide data to us, that a waiver was necessary and that it would be effective as far as their record is concerned.

Considering that we have 56 jurisdictions to work with, I believe we have made considerable progress towards implementation of the highway safety standards, but with this additional waiver authority, I think we will be able to manage the program even better.

This is not to say that we will not have the opportunity of reviewing specific parts of standards which will have an impact on all jurisdictions. I think a good example of this approach right now is the use of motorcycle helmets.

Without question, our data indicate that compulsory helmet usage reduced fatal or serious head injury by 63 percent and head injury of all types by 54 percent. I will continue to insist that such a standard be implemented by all States. By the way, all but three States presently have fully implemented helmet regulations.

There are other areas which we will emphasize and we will do this on the basis of good, strong information and data. In an instance where this basic type of important standard is not implemented in accordance with the program authority granted to the Department of Transportation, we will seek to have it implemented through what is commonly known as our sanction procedures. I prefer to talk about safety, not sanctions, but with the responsibilities that we have now, I feel it my duty to move in that regard.

This brings up the problem that the existing legislation requires that if we go to sanctions, we will have to withdraw all of the highway safety money and 10 percent of the highway construction funds although the 10-percent sanction may be waived if the Secretary finds it is in the public interest to do so. The administration bill on highway safety provides greater flexibility so that the State's entire highway safety program will not be wiped out merely because it does not implement one part of a standard.

As a further measure to increase flexibility of the State and community program, the Department proposes to return to a single section 402 authorizations as was provided by the original Highway Safety Act. I think that this will again give the States maximum flexibility in determining which parts of their highway program should be addressed.

We are also seeking increased flexibility in implementing the incentive grant program. To this end the Department proposes that the Secretary be provided with discretion in establishing criteria for identifying which States are entitled to receive the incentive grants for having made the most significant progress in highway safety.

Currently, the Secretary is statutorily required to base the criteria upon a single factor—a State's reduction of its highway fatality rate. This is a good bottom line item, but I think that any criteria that is based on a single item will lead some States to feel that they have been left out when they have made good progress.

We are asking for additional flexibility in that regard. Under the Department's proposal, the Secretary could add additional factors to the existing criteria or develop entirely new criteria, based upon factors other than fatality reduction. If you believe in good manage-

ment and if you believe in innovative procedures, I strongly urge that this particular part of the administration's legislation be carried forward.

In summary, I would like to urge that the Department and the States be given the tools needed to carry forward the national highway safety program.

I have talked about flexibility throughout my statement and I think that this flexibility would be provided by the Department's legislative proposals. They will permit tailoring of State and community programs to the needs of each individual State.

The proposals will also permit the reshaping of the incentive program so that the States will be induced to find more effective ways of promoting highway safety.

With that summary, Mr. Chairman, and your assurance that the complete statement will be entered in the record, I thank you very much.

Senator STAFFORD. Thank you very much, Dr. Gregory.

[Mr. Gregory's prepared statement follows:]

Statement of

JAMES B. GREGORY, ADMINISTRATOR

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Before the

SUBCOMMITTEE ON TRANSPORTATION

COMMITTEE ON PUBLIC WORKS

UNITED STATES SENATE

July 28, 1975

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear today to discuss the implementation of the Highway Safety Act and the Department's most important legislative proposals to further aid in our campaign against highway deaths and injuries.

When the Act was passed in 1966, over 53,000 highway deaths were recorded. The fatality rate was 5.7 deaths per 100,000,000 miles travelled and rising. It was clearly time for national emphasis on this growing health problem.

No one can say that States and communities were unaware of the problem; nor can anyone fault the efforts to that time by private sector groups. Without question, however, highway safety was not being given adequate priority and overall coordination of efforts was lacking. The Highway Safety Act brought a national focus to the problem and provided a means by which a coordinated, systematic attack could be made.

Without question, a great deal of progress has been made. In 1973, the fatality rate was 4.3 and falling. In 1974, the estimated highway deaths were just over 45,500, more than 9,000 below the previous year's toll, and the lowest total since 1963.

The dramatic 1974 reductions can be largely attributed to the energy crisis and the resulting national 55 mph speed limit. But we must not disregard the continuing impact of the Highway Safety Act and other safety measures during the previous seven or eight years and without question during 1974 as well. We must give every credit due for achieving these results to the State and local authorities who have made highway safety a priority program.

As the long lines at service stations gradually disappeared during early 1974, I regret to say that the amount of driving has increased as has the average speed on the Nation's highways. Nonetheless, voluntary gasoline conservation and observance of the 55 mph speed limit, plus enforcement efforts are still affecting the "bottom line" of highway safety results. Although deaths and injuries have increased compared to the same period in 1974, the totals are still well below those for 1973. I am happy to report that the June 1975 figures were actually 1 percent below those for June 1974. While this is good news, we cannot be complacent. Such a record is fragile at best. We must continuously work hard to maintain it in the long run.

The Department has devoted considerable effort to reversing the upward trend in speed. Pursuant to the 1974 Federal Highway Amendments, the Department will soon issue regulations requiring every State to certify that it is enforcing a 55 mile per hour limit. Any State which fails to so certify is prohibited by the amendments from receiving the Secretary's approval for its highway projects.

I must emphasize that State enforcement alone will not bring about lower speeds. The public must be convinced of the seriousness of the continuing energy problems and of the impact of higher speeds on fuel consumption and highway safety if we are to obtain the lower speeds. Accordingly, the Department is working hard on a program to convey these messages to the public.

As beneficial as the lower speeds have been, I do not believe that they are a panacea for the nation's highway safety needs. Further reductions in highway fatalities will depend upon other measures such as a well coordinated and effective State and Community Highway Safety Program. Continuing problems, like drunken driving and the failure to use safety belts, are causing thousands of avoidable deaths.

The Department is working hard with the States under existing statutory authority to strengthen the Highway Safety Program. One of the greatest needs is to improve program evaluation by the States through training, increased data

collection, and improved communications. To that end, we have developed an evaluation instruction manual. There is also a need to improve administrative procedures and management capability. Current State planning documents often do not include State and local programs and resources. Efforts are underway to establish a management system that will encompass the total Federal, State, and local highway safety effort. We anticipate that the system can improve a State's planning, programming and budgeting process. We are also developing a management information system to promote an exchange of information within and between all levels of program management and thereby strengthen State data analysis and planning capability.

As valuable as these administrative changes are, they cannot cure some of the most critical problems confronting the Highway Safety Program. These problems involve State and Federal flexibility and require legislative solutions. The Department's legislative proposals are intended to provide those solutions.

In my view, the contributions of the Highway Safety Program to highway safety management and to the long-term reduction in the fatality rate would not have been possible without the Highway Safety Program Standards. The States, for their part, see great virtue in maintaining standards as a framework for providing uniformity and direction to the national effort.

However, both the States and I agree that changes should be made regarding the standards. One recommendation of the States is that the standards be amended to provide greater allowance for State innovation and the uniqueness of local problems. Most States would prefer that the standards be revised to provide a better balance between requirements for particular measures and more performance-oriented requirements. Revision of the standards is also necessary since most were issued about 8 years ago and have never been amended. The new knowledge that has been acquired in that time should be incorporated in the standards.

Joint efforts by NHTSA and FHWA to revise the standards are under way with the participation of the National Conference of Governors' Highway Safety Representatives and the advice of private highway safety groups.

Unfortunately, we lack the authority to ensure that the revisions are put into effect in an expeditious, yet orderly, manner. Under the 1973 Highway Safety Act, we are prohibited from amending existing standards or issuing new ones without prior legislative authorization. The prohibition necessitates, in effect, our submission of the complete, detailed text of final rules for Congressional approval. I believe that the resolution of the frequently technical and highly complex issues of rulemaking should be left to the administrative rulemaking process.

The Department proposes, therefore, the deletion of the prohibition. To ensure full opportunity for public participation in the rulemaking process, we propose to replace the prohibition with a requirement that the rulemaking be conducted through informal rulemaking procedures. The requirement would provide for public meetings as well as for the submission of written comments by the public.

The requirement for following such rulemaking procedures would not replace the existing requirement for direct consultation with interested public and private parties concerning rulemaking. As in the past, consultation would begin during the development of notices of proposed rulemaking and continue through the issuance of final rules.

The Department's proposal also provides for a 120-day period between the issuance of a final rule establishing more stringent requirements and the effective date of the rule. This period would provide Congress with ample opportunity to exercise its normal oversight function.

Another State recommendation regarding the standards involves providing waivers from the statutory requirement that each State implement every provision in every standard. This recommendation arises partly from the fact that substantial resources are needed for a State to implement all provisions. It also arises from the significant differences in the degree to which many of the various highway safety problems addressed in the standards exist in particular States.

I too am concerned about the requirement for implementation of all provisions since it may hinder our efforts to assist the States in planning, developing and implementing result-oriented programs and conducting intensive evaluation of such programs. These efforts are our highest priority in the Highway Safety Program. In furtherance of our role in the management of the Program, we have arranged for key regional and State personnel to be trained in the Management-by-Objectives or MBO approach to highway safety planning. An examination of the States' 1976 annual work programs indicates that the States are making increased investments of Federal funds in high payoff programs. Here are some specific examples of the States' progress:

- o 9 States are using MBO techniques for their total program.
- o 12 States are using problem area instead of standard area identification as the basis for their planning.
- o 33 States have developed bottom line objectives in at least 1 program area.

To ensure continued progress, the Department proposes to expand the opportunity of the States to address their most pressing problems and undertake high payoff, result-oriented projects. This would be accomplished by giving the Secretary additional authority to waive the standards. Currently, the

Secretary may grant only short-term waivers to States wishing to conduct new or different highway safety activities on an experimental, pilot, or demonstration basis. The new authority would permit the Secretary to waive the requirement for compliance by a State with a standard or portion of a standard, for as long a period as he may specify. In return, the State would have to agree to adopt alternative highway safety measures having high potential for significantly reducing highway accidents, death, and injuries. To afford maximum flexibility, our proposal provides that the alternative measures need not be related to the same safety problem to which the waived standard is related. If a State devised an alternative measure with sufficiently high payoff, the State could even obtain a waiver from one of the key programmatic requirements for which implementation deadlines have been or may be set.

Considering that we have been working with 56 States and other jurisdictions in implementing the numerous and diverse requirements of the 18 standards, I think that substantial progress has been made. Nevertheless, even if the standards are revised and the States avail themselves of proposed additional waiver authority, I still anticipate NHTSA will insist that certain safety measures should be a part of any effective program.

We must increase our efforts nationally in order to effect further reductions in fatalities and injuries. With the cooperation of States and communities, we shall do so.

At the same time, I have already indicated that other safety standard requirements are of less priority, although they should be considered ultimately as a part of all States' programs. My personal approach to these implementation questions has always been that I would like to talk safety rather than sanctions. However, the provisions of the legislation are clear, and NHTSA will fulfill its responsibilities.

While I believe that the States which fail to implement the standards should be subject to the sanctions provided in section 402, I believe also that the sanction provisions need improvement. Section 402 provides the Secretary with discretion in determining whether a State is implementing the standards, but not in determining the severity of the sanctions to be imposed against a noncomplying State.

I regard as inappropriate the current requirements for withholding all of a noncomplying State's Federal highway safety funds and a full 10 percent of its construction funds in all noncompliance cases, regardless of the nature or extent of noncompliance. To cure this shortcoming, the Department

proposes to provide the Secretary with the flexibility to withhold 50 to 100 percent of a State's safety funds and 5 to 10 percent of its construction funds. The precise amount withheld in a particular case would depend partly upon the Secretary's assessment of the gravity of the State's non-compliance.

Section 402 also provides that once a noncomplying State's safety funds are withheld, they are permanently lost to the State. This result is unnecessarily harsh when a State is reasonably prompt in eliminating the deficiencies in its program. Accordingly, the Department proposes that a State be given its withheld funds if it eliminates its deficiencies prior to the end of the fiscal year for which safety funds were withheld.

As a further effort to increase the flexibility of the State and community program, the Department proposes a return to the single section 402 authorization that was in the original Highway Safety Act. Since fiscal year 1972, the Department has combined the separate section 402 authorizations in the 1970 and 1973 Highway Safety Acts into a "single-column" apportionment. The "single-column" approach gives the States much needed flexibility. Without this approach, each State, regardless of its particular problems and desires, would be required to conduct a program of exactly the same proportions as the program of every

other State. Our legislative proposal will provide clear statutory authority for this provision of flexibility to the States.

The Department is seeking increased flexibility in implementing the incentive program also. To this end, the Department proposes that the Secretary be provided with discretion in establishing criteria for identifying the States that are entitled to receive incentive grants for having made the most significant progress in highway safety. Currently, the Secretary is statutorily-required to base the criteria upon a single factor, the States' reduction of their highway fatality rate.

/ While the statutory approach promotes objectivity in the selection of States to receive the grants, it also has several shortcomings. It makes qualification for incentive grants very difficult for States which already have low fatality rates and for the States with very large populations. More notably, the statutory criteria do not appear likely to ensure that the incentive program will achieve its full potential and purpose. I understand that purpose to be inducing the States to make significant additional highway safety efforts. The current incentive program is so broad in its scope that its beneficial effects on State efforts cannot be readily, if at all, identified. /

Under the Department's proposal, the Secretary could add additional factors to the existing criteria or develop

entirely new criteria based upon factors other than fatality rate reduction. One new factor might be the progress made by the States regarding certain fatality prone groups. Another might be the extent to which the States accomplish selected key goals set forth in their highway safety programs.

In summary, I urge that the Department and the States be given the tools needed to carry forward the national highway safety program. The additional flexibility that would be provided by the Department's legislative proposals will permit tailoring the State and community program to the needs of individual States. It will also permit reshaping of the incentive program so that the States will indeed be induced to compete in finding more effective ways of promoting highway safety.

Mr. Chairman, this concludes my prepared testimony. I will be pleased to answer any questions that the Subcommittee may have.

Senator STAFFORD. The Chair notes that Governor Tiemann, Federal Highway Administrator, has arrived and will invite him to proceed as the next speaker.

Governor, we have tried to limit ourselves to 15 minutes in oral presentations. If you have a longer written statement the Chair has already arranged to place all the full written statements in the record. So you are invited to proceed as you wish, sir.

STATEMENT OF NORBERT T. TIEMANN, ADMINISTRATOR, FEDERAL
HIGHWAY ADMINISTRATION

Mr. TIEMANN. Thank you very much, Senator Stafford. I do have a formal statement which I will read within the allotted time.

I apologize for being late. We were involved with another committee in the other House having to do with H.R. 3150, which also is giving us some serious problems.

Senator STAFFORD. Governor, we understand the problem of having too many committees. It happens to us on both sides of the aisle right along. So no apology is needed.

Mr. TIEMANN. Thank you very much.

We are pleased, of course, to be able to make this presentation today and accompany this very distinguished panel. Implementation of the Highway Safety Act of 1966, particularly the FHWA portion of the section 402 program, has been an integral part of the Federal Highway Administration's total highway safety program and because of our belief that greater gains can be accomplished we have singled out the highway safety program as one of our 10 fiscal year 1976 program emphasis areas.

Under this emphasis program, we would enhance the safety of all public roads and streets through: (a) Improved overall management of safety programs; (b) improved accident data collection and analysis system; and (c) substantially increased use of Federal-aid funds for safety improvement in fiscal year 1976.

The latest statistics obtained just prior to today's hearing indicate a decline in national accident rates as a result of the safety program. (See attachment I.) FHWA has been collecting fatal accident statistics since 1966. During the 1966-73 period, the number of motor vehicle traffic deaths per year in the United States increased 7 percent while traffic volume increased 41 percent. The result was approximately a 24-percent drop in the U.S. fatality rate.

In 1974, both the number of deaths and the fatality rate dropped sharply. Much of the drop can be attributed to the effects of the energy crisis and the 55 mile per hour speed limit. For this reason, we have disregarded 1974 figures in commenting on long-term trends.

Early results indicate that 1975 rates may be close to those experienced in 1974, but the number of deaths will probably go up because of an increase in vehicle-miles traveled. The number of reported motor vehicle traffic deaths in 1974 was 46,049—about 9,000 less than the previous year; the 1974 fatality rate was 3.59. A complete breakdown of fatality rates by highway system is not yet available for 1974.

The controlled access highways which make up the Interstate System have consistently had fatality rates about one-half of the rates experienced on noninterstate highways. In 1973 the rate was 2.31 on interstate and 4.58 on noninterstate highways.

In 1966, about 23 percent of the travel on Federal-aid primary highways took place on the Interstate System. By 1973 the percentage had increased to 33 percent.

This transfer of traffic to safer, controlled-access facilities is reflected in improved fatality rates. The 1966-73 decrease in fatality rates on Federal-aid primary highways was 29 percent, as compared with the 24-percent decrease in rates for the entire system of roads and streets in the United States.

FHWA has been working closely with the National Highway Traffic Safety Administration—NHTSA—to insure coordinated administration of the overall 402 highway safety program. The two administrations have reached agreement on procedures for joint development and issuance of directives pertaining to the administration of the total program. Highway Safety Program Manual volumes, containing basic program direction for the States, also have been issued.

In keeping with FHWA's policy of maximum decentralization to field offices, division engineers have been delegated principal authority to:

- Approve State comprehensive highway safety plans.
- Approve State annual highway safety work programs, execute agreements pursuant to approved work programs, and grant authorization to proceed with the work.
- Determine whether the highway safety program is administered through a State agency that has adequate powers and is equipped and organized to carry out such program.

We have our Federal-State relationship in the administration of the 3+ standards as a partnership. In many ways, it is similar to the successful Federal-State "partnership" developed over the years under the Federal-aid highway program.

The administration of the program is not without problems and we have a number of suggestions and proposed actions for improvement.

The incentives criteria revisions contained in our Federal-Aid Highway Act of 1975 would be an improvement over the present fatality rate approach which permits objectivity in selecting recipient States, but does not insure that the incentive program will act as a catalyst.

With discretionary authority, the Secretary could consider basing the criteria on other factors, such as progress being made by States in certain emphasis areas. Kinds of activities which could be considered are: Special target groups and goals set forth in their programs, such as early compliance with the Manual on Uniform Traffic Control Devices—MUTCD, significant pedestrian protection, especially for the aged and preschool children.

Another suggestion to improve the administration of the 402 program is to update our standards. We have been considering this matter jointly with NHTSA and the National Conference of Governors' Highway Safety Representatives.

One of the objectives in the FHWA program emphasis area for highway safety is to improve overall management of the safety program. Essential to this is the establishment of a focal point for safety responsibilities at the State level to coordinate their safety programs with those of other State agencies and local jurisdictions.

FHWA field offices are instituting procedures and providing staff to fully support these State endeavors in integrating the 402 program with the highway safety construction improvement program. In keeping with our objective for improved management of highway safety programs, FHWA will contract for a highway safety management program study.

The major outputs of this 20-month study will be:

1. Guides for improving flow of technical information between units of local and State highway safety related organization elements.

2. Guides for safety training programs.
3. Guides for improved program implementation.
4. More effective application of State and Federal safety research.
5. Guidance to FHWA management for improving effectiveness of safety programs.

We believe that improved liaison between the Governors' representatives, State and local highway agencies, and the interrelationship of the 402 and safety improvement construction programs will result in program action that will take place primarily in local jurisdictions.

Our 402 program requires local jurisdictions to provide a basic capability for program operations in local communities. We have participated in upgrading the traffic engineering function and staffing in many local communities.

This increased capability and expertise, combined with Federal funding assistance for off-system roads, will have a major impact on our safety program activities.

Under the Highway Safety Act of 1973, funding was provided for six categorical programs for physical improvements for highway safety. In addition, the 1973 act provided categorical funds for data collection. I would like to comment briefly on the progress of these six highway safety programs.

During fiscal year 1975, approximately \$445 million was obligated in the six categorical safety programs. In addition, \$632 million of regular highway safety funds have been expended during the same period.

Senator STAFFORD. If I could interrupt just a second there? I notice that in your printed statement it says \$632 billion.

Mr. TIEMANN. I am sorry about that. We are so used in dealing with big numbers that when we get down to millions, we get confused. I appreciate the Chair calling it to our attention.

This does not indicate the progress in present programs by all States, but simply it discloses the successful initiation of the total safety improvement program provided by the 1973 act.

Progress has been best in the high hazard locations, roadside obstacles and pavement marking demonstrations. Each of these in the aggregate has exceeded fiscal year 1974 apportionments before May 31, 1975.

This progress is attributed to the fact that the high hazard and roadside obstacle programs provided categorical funding for projects that may already have been identified through the spot safety improvement program first established in 1964 and standard 9, identification and surveillance of accident locations.

The pavement marking demonstration program is easier to implement because it requires no surveys or priorities and does not require extensive preliminary engineering before implementation.

The progress of obligating funds under the railroad-highway crossing and safer roads demonstration programs has been slower. However, this apparent slower rate of project initiation for the railroad-highway crossing program is misleading.

Consideration should be given to the fact that regular Federal-aid highway funds are available to eliminate hazards at railroad crossings with the Federal share up to 100 percent of the cost, whereas the Federal share payable under the railroad-highway crossing program in the 1973 act is fixed at 90 percent.

As an illustration, in fiscal year 1974 over \$15 million in Federal-aid funds were obligated for railroad-highway grade crossing safety improvements while only \$7 million of this was from the categorical funds provided by the 1973 act.

Concern the safer roads demonstration program, we consider the progress as good. It is slower than the others, as was expected, because it is breaking new ground and normally requires the involvement of yet another level of government, the local jurisdictions.

It is breaking new ground because it provides for the first time, since the 1921 Highway Act, Federal-aid highway funds for projects that are not on a Federal-aid system. Because of this, the majority of the roads eligible for this program are under local jurisdictions, in the counties, cities, and towns.

To get these jurisdictions into the program required an extensive effort by the States to inform them of the program and set up procedures for its implementation.

Another factor not to be overlooked is that initially the safer roads demonstration program did not allow the use of Federal-aid funds for improvement of high-hazard locations. These types of improvements are among the most cost effective and consequently the most desirable to be undertaken.

It was not until the enactment of the Federal-aid highway amendments of 1974 on January 4, 1975, that high-hazard locations improvements were allowed under this program. As a result, this program has been able to operate at its full potential for only the last 6 months.

A fact to keep in mind is that Federal-aid funds obligated are not an equitable measure of total program activity. During the initial program start-up, the States must develop statewide safety programs and establish priorities since there were no safety projects "lying on the shelf" awaiting implementation.

These activities, while effective in producing a backlog of construction projects, do not obligate a substantial amount of money. Normally, in programs of this nature we find that only 5 percent of the total Federal-aid funds expended is for program development while 95 percent is for physical construction.

We have had considerable progress in the high-hazard location category. Implementation procedures were begun by the States for identification and surveillance of accident locations with the establishment of Highway Safety Program Standard No. 9.

By 1973, most States had location reference systems and traffic reference systems for the major highways. The States are now expanding this capability to include the much larger mileage of lower class roads.

A November 1974 survey by FHWA showed a national average of about 75-percent compliance with the capability for identification and surveillance of accident locations on all roads.

Preliminary figures show that over \$50 million of roadside obstacle funds were obligated in fiscal year 1975. Even though Highway Safety Program Standard No. 12 required identification and correction of hazards within the right-of-way of all roads, before 1974 most of the work was done on the Interstate and major freeways.

/The Highway Safety Act of 1973 (23 U.S.C. 153) requests each State to conduct and systematically maintain an engineering survey on all highways to identify roadside obstacles. Nationwide, this roadside obstacle survey is about 75 percent complete./

The committee has expressed a special interest in the problems connected with highway railroad grade crossings. The proposed 1975 Highway Act would exclude railway-highway grade separations from the highway safety programs.

This is considered to be appropriate because grade separations are undertaken for a variety of reasons rather than solely for highway safety reasons. The bill also calls for emphasis on railroad-highway warning devices under an element of the safety program. This emphasis would give assurance of continuity to that program.

Federal-aid funds are being obligated for grade crossing improvements at a reasonably satisfactory rate despite some problems such as divided responsibility in jurisdictions, the multiple parties involved, the delays in executing State-railroad agreements, labor jurisdictional problems encountered by railroads, and the railroads' concern with liability.

Over 350 warning device installations were authorized during the first 3 months of fiscal year 1975 at a cost of over \$15 million. In addition to the \$11 million authorized under the highway safety programs, over \$4 million was authorized for such installations from other Federal-aid highway funds.

This is a significant increase over the rate with which such work had been undertaken with Federal-aid funds in the past.

I know this committee is very interested in the progress of the special bridge replacement program. Applications for replacement of deficient bridges are being received and processed on a daily basis and structures are continually being identified by the States as candidates for replacement as the States proceed with their routine bridge inspections.

The number of candidates for replacement now identified total 16,000. From the initiation of the program through June 31, 1975, 576 of high priority bridges have been selected and are in various stages of replacement.

All funds authorized through fiscal year 1975 have been allocated and the remaining funds made available by the Federal-Aid Highway Amendments of 1974 will be distributed in much the same manner as the fiscal year 1975 funds.

The status of the funds is as follows:

Total allocated.....	\$342,750,000.00
Obligations: Through fiscal year 1975.....	310,949,315.38
Unobligated balance.....	31,800,684.62
Unallocated (fiscal year 1976).....	121,250,000.00
Total funds authorized for fiscal year 1972-76.....	464,000,000.00

Much of the remaining unobligated balance is earmarked by the States for bridges delayed due to environmental problems or length of design time.

Our proposed 1975 highway bill will permit up to 30 percent of the highway safety improvement program funds apportioned to each State to be used for the replacement of inadequate bridges. Also, the

rural and urban apportionments may also be used for bridge replacement.

Bridges, by their nature, are enormously costly, therefore, we have included a 30-percent limitation so that the bridge projects would not eat up a State's safety funds.

The replacement of inadequate bridges addressed a distinctly different aspect of highway safety. It provides for the replacement of structures that have been or are in danger of being closed because of structural deficiencies.

It is not directly related to accident reduction through a construction program. Only the unfortunate occurrence of a catastrophic failure would this be so. This program is to prevent such catastrophes from occurring, not to react to their occurrence.

We believe that the proposed changes in the structure of the highway safety improvement programs by the 1975 Highway Act would be most beneficial. Each of the six categorical programs have distinct, though similar, regulations and procedures for their implementation.

This, in itself, is an impediment to providing maximum benefits from the limited funds available for highway safety improvements. Combining these programs into a single program will permit the balance of funding between the various types of safety improvement programs to be determined by the States and concurred in by FHWA.

This would insure that the basic goals of the existing programs are continued with improved flexibility to meet each State's needs. The proposed bill permits expenditure of both rural and urban systems funds for highway safety improvement projects but restricts the use of the highway safety improvement funds to safety projects.

Also, the use of highway safety improvement funds is expanded by permitting their use on any public road except for the Interstate System. Safety projects on the Interstate System would be funded with regular Interstate funds.

We believe the consolidated highway safety improvement program will eliminate redtape by combining the six programs into one under one set of regulations and procedures to implement the total program.

We believe that the basis for project implementation should be changed so that the overall potential provides the most saving in lives, injuries and property damage for each dollar spent and so that the project will not be based on whether it meets the requirements for a specific categorical program.

Recently, FHWA has been criticized for alleged failure to incorporate the latest safety features and design in new road construction. Section 109 of title 23 contains a statutory requirement for FHWA to approve only projects which will adequately meet the existing and probable future traffic needs and conditions in a manner conducive to safety, durability and economy of maintenance and which are designed and constructed in accordance with standards best suited to accomplish the foregoing objectives and to conform to the particular needs of each locality.

A large portion of those highway design standards, specifications, policies, and guides adopted by FHWA under 23 U.S.C. 109 are the result of cooperation with the American Association of State Highway and Transportation Officials (AASHTO). These design standards are included in AASHTO publications and are the result of FHWA leadership in their formulation.

Criticism concerning FHWA use of AASHTO standards shows a failure to recognize FHWA involvement and influence in development of specific AASHTO publications such as the AASHTO "Highway Design and Operational Practices Related to Highway Safety (Yellow Book)."

FHWA did not wait for the issuance of the "Yellow Book" before specific safety policies were developed. Examples of such previous policies included:

(1) A Circular memorandum (CM), dated December 22, 1965, on the topic "Highway Signs and Appurtenances—Safety Considerations,"

(2) Instructional memorandum (IM) 21-6-66 entitled "Safety Provisions for Roadside Features and Appurtenances," and

(3) CM, dated January 6, 1967, entitled "Safety Provisions and Sign Placement." Safety design is a dynamic area and did not stop with the development of the "Yellow Book." FHWA has readily accepted new advanced design criteria and implemented them when the basic data clearly supports their adoption.

Our memorandum concerning yielding sign and light supports and crash cushions are examples of FHWA's direct action. In addition, the MUTCD and the Association of American Railroads (AAR) bulletin No. 7, are examples of FHWA's action with organizations other than AASHTO in developing highway design standards.

Currently, FHWA has contract work in progress on a Crash Cushion Design Manual and a Protective Systems Manual to supersede NCHRP report 118. As a general comment, implementation of latest state-of-the-art technology in the above areas is very difficult because of new information becoming available every month from the research sector.

This is the dynamic problem which FHWA faced and as a result directed the Office of Research and Development to prepare implementation packages in this area. In the interim, FHWA policy is to disseminate the latest usable research results as they become available through FHWA directives to the operating offices.

We have recently completed a study of FHWA's procedures and efforts to provide safe roadside design. This study also included a review of the center for auto safety (CAS) report, "The Yellow Book Road: the Failure of America's Roadside Safety Program."

While concluding that the findings set out in the CAS report were unsubstantiated, the FHWA study did make several recommendations that will further strengthen our procedures and efforts.

The recommendations were made in light of recent legislation providing various funding for off-Federal-aid system construction and addressed the issue of providing safe roadsides in the construction of all highways.

The Federal Highway Administration's present operating procedures are adequate to insure the application of sound roadside design principles on all new Federal-aid highway projects. These procedures are producing the designed results as substantiated by a recent study of fatal accidents on the interstate system.

One of our recent studies shows that these procedures are producing the desired results as evidenced by reduction in the fatal accidents.

This study shows a lower fatality rate for both rural and urban sections of the interstate system opened to traffic since 1967 when the

AASHTO "Yellow Book" was issued (See attachment II regarding rural Interstate.) Incorporation of safety items takes time—longer than we would like—but progress is being made and we are confident that it will continue and increase.

I have tried to touch on as many aspects of the safety program as our limited time will permit. In summary, I feel that great benefits are resulting from implementation of our existing programs and that the amendments proposed in the 1975 highway bill will further improve highway safety in the Nation.

This concludes my formal statement and I will be pleased to answer any questions that the subcommittee may have.

Thank you, Mr. Chairman.

Senator STAFFORD. Thank you very much, Governor Tiemann.

[Attachments to Governor Tiemann's statement follow:]

ATTACHMENT I

	Vehicle miles (billions)	Traffic deaths	Fatality rate ¹	All Federal- aid primary ¹	Interstate fatality rate ¹	Noninterstate fatality rate ¹
1966.....	928	51,524	5.55	5.53	3.08	5.85
1967.....	965	51,559	5.34	5.35	2.89	5.66
1968.....	1,020	53,831	5.28	5.20	2.98	5.60
1969.....	1,066	55,014	5.16	4.94	2.90	5.52
1970.....	1,111	53,654	4.83	4.60	2.69	5.19
1971.....	1,117	53,742	4.57	4.38	2.60	4.92
1972.....	1,259	55,686	4.42	4.24	2.43	4.80
1973.....	1,309	55,100	4.21	3.94	2.31	4.58
1974.....	1,283	46,049	3.59	(?)	(?)	(?)

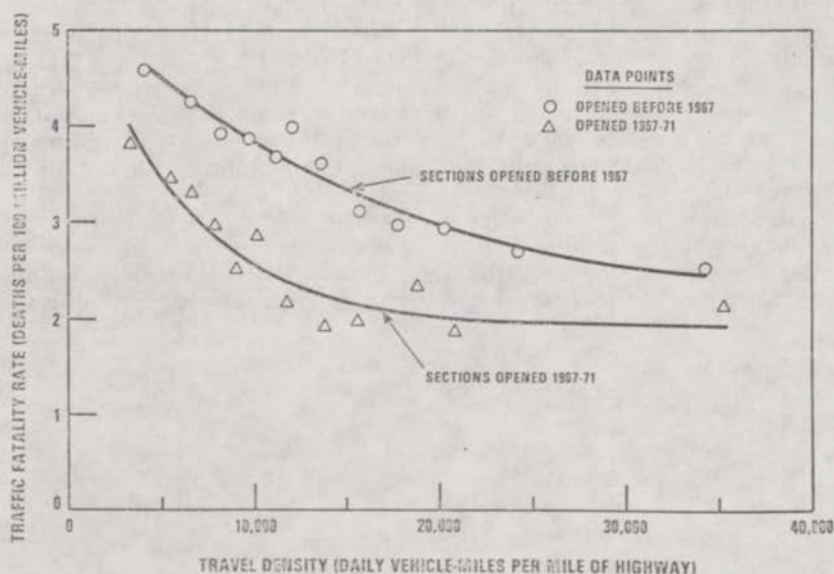
¹ Deaths per 100,000,000 vehicle miles.

² Not yet available.

Source: State highway department reports on table TA-1.

ATTACHMENT II

1969-72 FATALITY EXPERIENCE ON RURAL INTERSTATE HIGHWAYS



Senator STAFFORD. The Chair's intention, in case there is any doubt, is to ask that we complete all of the statements before going to questions. So the Chair will next invite Mr. Art Delibert, from the Center for Auto Safety, to proceed.

**STATEMENT OF ARTHUR DELIBERT, CENTER FOR AUTO SAFETY,
ACCOMPANIED BY LYNNE SMITH, ELLEN MILLER, AND MARK
STEINBACH**

Mr. DELIBERT. Thank you.

Good morning, Mr. Chairman, My name is Arthur Delibert. I am here today representing the Center for Auto Safety. I am accompanied this morning by several other staff members—Lynne Smith, Ellen Miller, and Mark Steinbach of the highway project—who will be glad to help answer questions.

The Center for Auto Safety is an independent, nonprofit organization with a longstanding interest in vehicle safety. For some years, our activities focused almost entirely on the National Highway Traffic Safety Administration and the auto manufacturers. In 1973, however, we turned our attention to the Federal Highway Administration and the question of Safe highway design.

Specifically, we began to study the question of why brandnew highways are still designed and built with well-known safety errors. Our research into this question spans some 14 months and included visits to eight States, inspection of 55 recently completed Federal-aid highway projects, and interviews with over 100 Federal and State highway officials, highway consultants, and private researchers.

The result was this report, "The Yellow Book Road: The Failure of America's Roadside Safety Program," first published in December. I know you have received a copy.

Senator STAFFORD. The report will be received for the files.

Mr. DELIBERT. Since this report was released, we have devoted our efforts to securing the implementation of our recommendations, prodding the States into greater implementation of the 1973 highway safety improvement programs (the so-called title II programs) and monitoring the day-to-day activities of the FHWA.

Needless to say, we have a great deal of information we would like to share with you today. However, we understand that the committee is busy, and we understand the time limitations. So our testimony will actually deal with only one aspect of our findings, the continued construction of hazards on the newest highways.

Mr. Chairman, even as we sit here today, many State highway departments are building into their newest highways design features long recognized to be safety hazards: Poorly designed bridge parapets, gratuitous roadside obstacles, poorly designed guardrails, and the like.

These are precisely the kind of hazards that claim at least 15,000 lives each year in single-vehicle run-off-the-road crashes on older highways, and they are precisely the kind of hazards that the Congress has sought to remove from the older highways through the title II safety programs. Yet they are still appearing in some of the nation's newest highway construction projects.

Two months ago, we visited a brand new Interstate Highway project in the District of Columbia area, I-95 in Virginia, just south of the 14th Street Bridge. We would like to share with you today, through a few slides, a portion of what we found on that project, all within about a mile-long stretch of the highway. Can we put the slides on now?

Senator STAFFORD. Certainly.

Mr. DELIBERT. One of the first things that came to our attention as we came across the bridge was this concrete box (fig. 1). It is a massive obstruction only a few inches off the pavement. You can see from the marks on the side of it, where the concrete was poured into the wooden mold, that this thing is still quite new.

As the next slide shows (fig. 2), we walked up and took a look inside of this concrete box in hopes of finding some reason why an obstruction like this would be on the roadside. As you can see, there is nothing there. It is nothing but a booby trap and a brandnew booby trap.



Figure 1



Figure 2

This is a page from the Federal Highway Administration's green book, "The Handbook of Highway Safety Design and Operating Practices" (fig. 3). We include it to illustrate the point that the kind of guardrail used on this project, blocked-out W-beam on steel posts, can be expected to deflect as much as 4 feet in a severe crash. For that reason, researchers emphasize that this kind of guardrail can only be used where there is 4 feet between the guardrail and the obstruction you are trying to protect the motorist from.

At this location on the project (fig. 4), we found 28 inches between the guardrail and this bridge pillar, less than 2½ feet. You see the barricade up here, this is not yet open to traffic; but when it is open, a motorist coming along here who runs off the road will have a chance of a severe crash into this bridge pillar despite the guardrail being there.

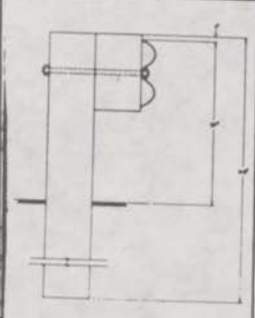
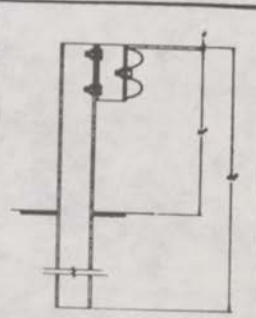
		
SYSTEM	BLOCKED-OUT "W" BM (WOOD POST)	BLOCKED-OUT "W" BEAM (STEEL POST)
DEFLECTION	2 ft	4 ft
POST SPACING	6' - 3"	6' - 3"
POST	8x8" Douglas Fir	W6x8.5

Figure 3

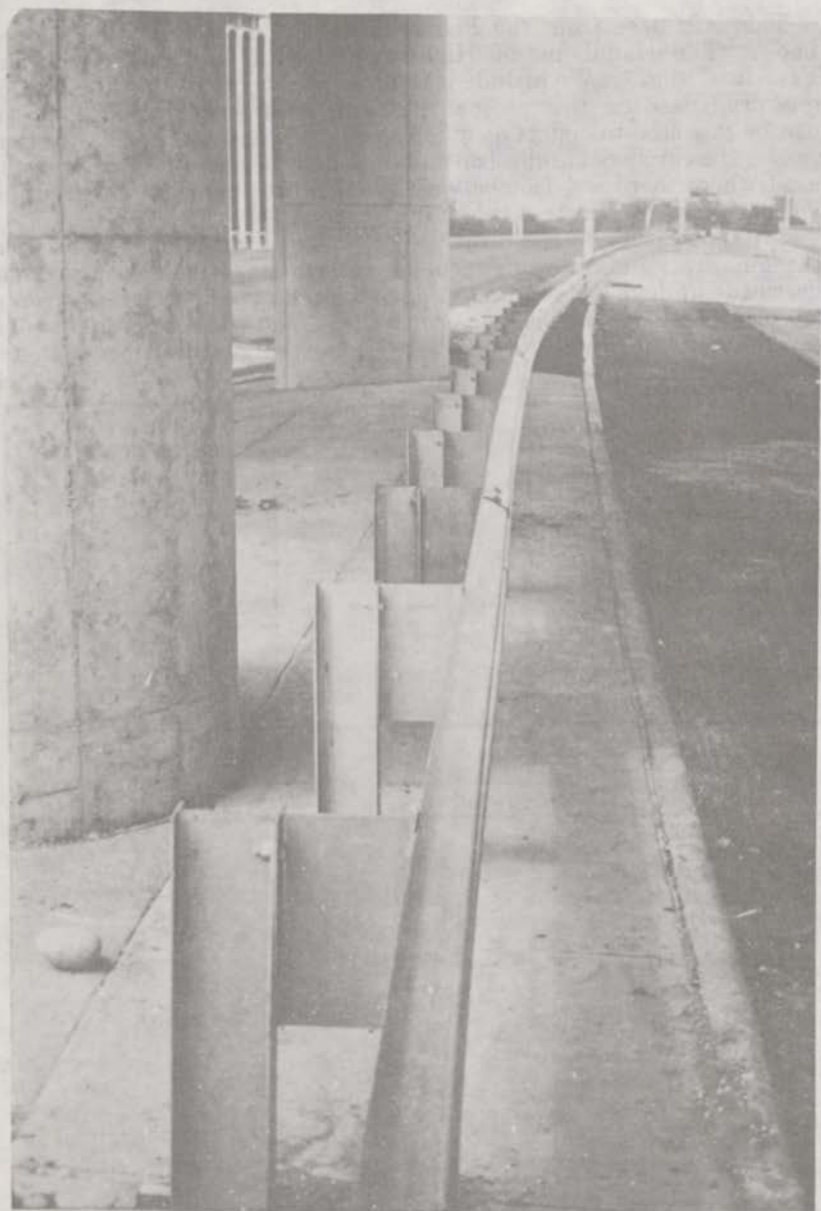


Figure 4

Here you see a place where a guardrail post was dropped out because this light pole is too close to the guardrail (fig. 5). There isn't room for a post here; I think the light pole is 21 or 22 inches behind the guardrail. Again, a good deal less than 4 feet. So here is a guardrail post missing because of the light pole, then two in place and then two more missing because of this drainage inlet here. We doubt very much that this piece of guardrail would perform as intended in a crash.

This is another page from the green book to illustrate the elements necessary in the transition from a metal beam guardrail to a concrete bridge parapet (fig. 6). This transition is a little bit tricky because, as we mentioned, this guardrail deflects back as much as 4 in a crash. If a motorist strikes this guardrail upstream of the bridge parapet, and the guardrail flexes back, he is going to have a severe crash against this concrete parapet, unless the transition is done just right because the concrete parapet of course doesn't flex back at all.

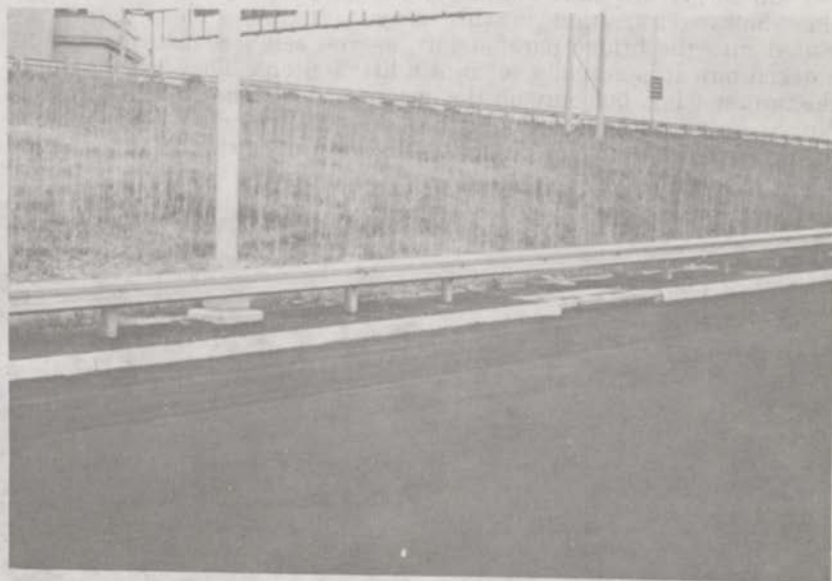


Figure 5

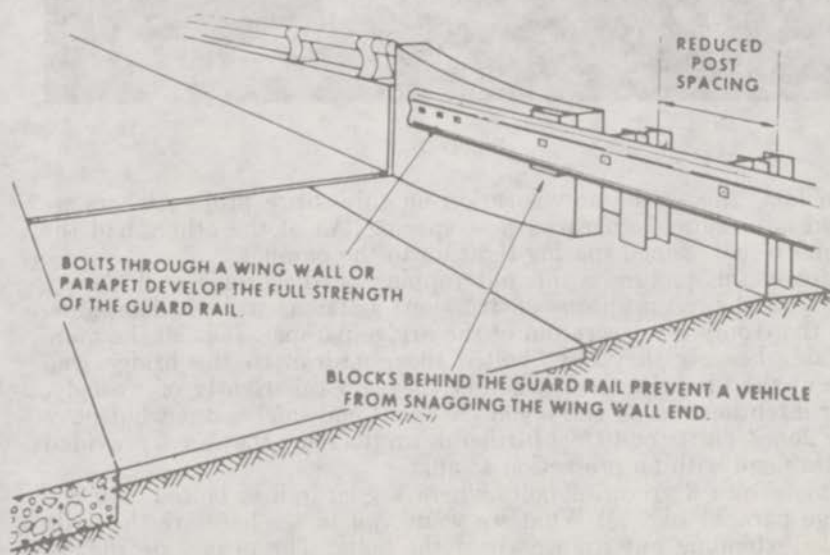


Figure 6

The three elements necessary to prevent that kind of crash at the transition are: Bolting the guardrail to the concrete wall to give the rail its full strength; reducing the guardrail post spacing to increase the stiffness of the rail so a motorist would go from the very flexible guardrail to the less flexible and finally to the rigid wall in a relatively smooth transition; and this block-out, to keep the car offset from the concrete wall so that the wheel will not snag against the wall's vertical end.

I am sorry, this slide doesn't show up too well in this room, but this shows a transition in this project (fig. 7). The guardrail is bolted into the bridge parapet but, as you can see, instead of being blocked out, it is actually set into a little cutout. They have reduced the post spacing, but only on the last two posts. The NCHRP Report No. 54 on guardrail points out that the last five or six posts need to have reduced spacing in order to effect a proper transition.



Figure 7

In fact, this is the only location on this entire project where we found any reduced guardrail post spacing. All of the others had the regular 6-foot, 3-inch spacing right up to the parapet.

Also in this picture is this outcropping on the bridge wall. Again, this is a wholly gratuitous obstruction; as far as we can determine, it is there only for decoration of the bridge parapet. It is all the more amazing because they have bolted the guardrail to the bridge wall here at the upstream end; whether they did this rightly or wrongly, their intention was to carry you past that end safely. But what have they done? Thirty or 40 feet further down the road, they have provided another end with no protection at all.

This shows a group of bolts where a guardrail is bolted into the bridge parapet (fig. 8). What we want you to see here are the little cracks extending out from each of the bolts. The next slide (fig. 9) shows a place where such cracks have opened up all the way and the next slide (fig. 10) shows another location where the same thing has

happened. This has occurred because of the use of the wrong end piece in attaching the guardrail to the bridge parapet and because of very sloppy technique in punching the bolt holes in these pieces.

This is out on the reversible busway (fig. 11). They have cleverly managed to construct a reversible hazard. In the morning, when traffic here is going from left to right, a vehicle which strikes this guardrail and slides along this way (left to right), would snag on this end piece. In the evening, when traffic comes from right to left, a vehicle that runs off the road would have a chance of a near 90-degree collision with this piece of guardrail.

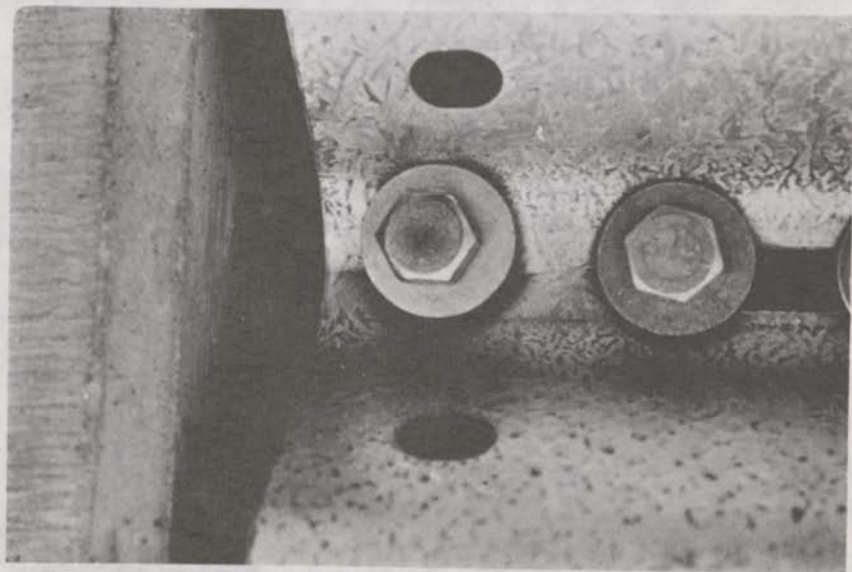


Figure 8

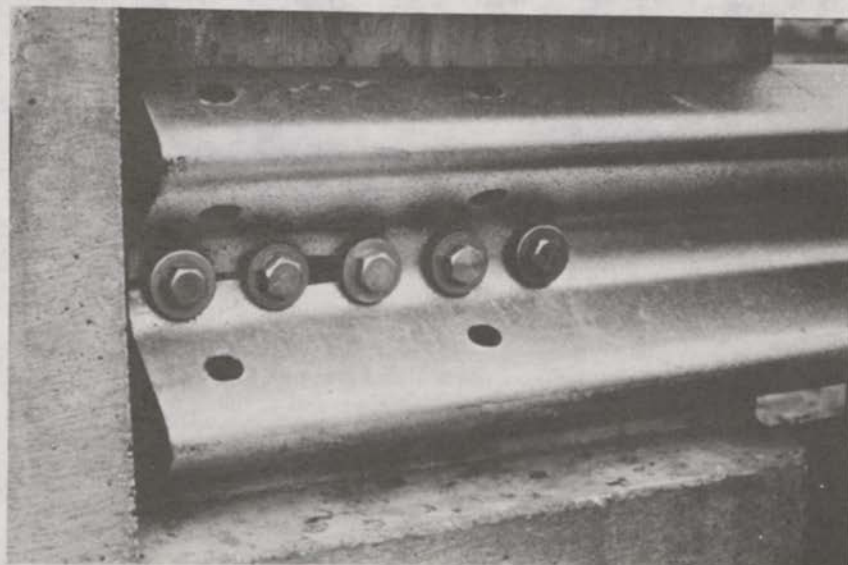


Figure 9

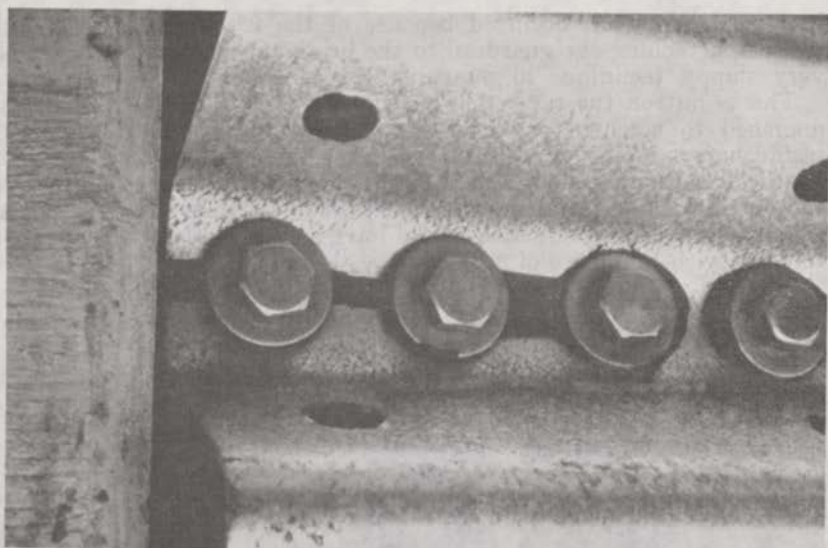


Figure 10



Figure 11

The research reports on guardrail which say it is a safe appurtenance for use at the roadside are the result of tests at angles like 15 and 25 degrees; but the literature is full of reports of crashes at angles of 50 and 60 degrees and greater where an impact with a guardrail can be fatal.

Senator STAFFORD. Mr. Delibert, for the education of the committee, what is the standard type crash for which these guardrails are built?

Mr. DELIBERT. They are tested at 25 degrees and 60 miles an hour.

Senator STAFFORD. Using 4,000-pound vehicles at 60 miles an hour and a 25-degree angle of crash?

Mr. DELIBERT. Yes.

Those are all the slides we have time for, Mr. Chairman.

We showed these slides and many others to the Virginia Department of Highways in Richmond on June 5. We would like to submit for the record a letter from Virginia Chief Engineer John Harwood, outlining the corrective measures the State intends to take.

[The letter follows:]

DOUGLAS B. FLYNN, COMMISSIONER

LEONARD A. HALL, BRISTOL, BRISTOL DISTRICT

HAROLD G. FRANK, ROANOKE, VALEN DISTRICT

THOMAS W. CLARK, LYNCHBURG, LYNCHBURG DISTRICT

MORRIS W. DODGE, RICHMOND, RICHMOND DISTRICT

WILLIAM T. ROSS, YORKTOWN, YORKTOWN DISTRICT

DOUGLAS G. JAMES, FREDERICKSBURG, FREDERICKSBURG DISTRICT

RALPH A. BERTON, FALLS CHURCH, FALLS CHURCH DISTRICT

ROBERT S. LANGER, STANTON, STANTON DISTRICT

T. RAY HANSELL, II, CHESAPEAKE, AT LARGE (RRA)

CHARLES E. HOOPER, JR., CHESAPEAKE, AT LARGE (RRA)



COMMONWEALTH of VIRGINIA

DEPARTMENT OF HIGHWAYS & TRANSPORTATION

1221 EAST BROAD STREET

RICHMOND, 23219

July 17, 1975

JOHN E. HANCOCK

DEPUTY COMMISSIONER & CHIEF ENGINEER

W. E. G. BRISTON

DIRECTOR OF ADMINISTRATION

H. GORDON BLUNDEN

DIRECTOR OF PROGRAM MANAGEMENT

J. M. BRAY, JR.

DIRECTOR OF OPERATIONS

J. P. ROYER, JR.

DIRECTOR OF PLANNING

F. B. GOLDSON

DIRECTOR OF ENGINEERING

IN REPLY PLEASE REFER TO

Safety Standards

Ms. Lynne Smith
Highway Safety Project
Center for Auto Safety
1223 Dupont Circle Building
Washington, D. C. 20036

Dear Ms. Smith:

This refers to your letter of July 14, asking what has been done about the matters on I-95 in Northern Virginia which you recently called to our attention.

I have just now received a report covering an investigation made by our engineers, accompanied by engineers of the Federal Highway Administration.

In general, it appears some of these situations occurred through the use of standards which were considered most adequate when the projects were advertised for bids, but now have been superseded by more recent research and by testing and field operational experience.

Our standards are now being reviewed and revised where necessary to conform to the latest research results. This includes the placement of guard rail in relation to curbs, strengthening of guard rail at bridge approaches by reducing the post spacing, providing for at least a four-foot space between the guard rail and any fixed object or breakaway sign supports and a review of our guard rail attachment procedures and guard rail backup plates.

In addition, we plan to institute a training program for all people involved in a project from design to completion, so they might be aware of these conditions and take corrective action whenever they are noted.

Many of the changes in our standards outlined above have already been made or are being made at this time.

In regard to the specific project, it was generally felt that a major overhauling of the guard rail position in respect to the curb is not in order at this time. This would be a major undertaking, and since research is a continuing process, it could well be that additional research would reflect additional change.

A HIGHWAY IS AS SAFE AS THE USER MAKES IT

Ms. Lynne Smith

July 17, 1975

Our major effort on the I-95 project has been to identify all areas where pocketing could occur and areas where the need for additional posts on approaches to bridge parapets and retaining walls is indicated. Where posts have been omitted at inlets, we plan to correct these as soon as possible.

We also plan to fill in the notched out area on the southbound Boundary Channel Drive overpass, correct guard rail connections and install four impact attenuators. Where impact attenuators are installed, curbs will be removed.

Agreement has been reached with the Federal Highway Administration on all of this.

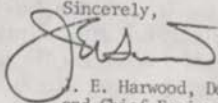
The numerous instances of guard rail bolts not being tightened or bolts missing and guard rail split were noted during the inspection. These conditions would have been corrected prior to or at the final inspection. The split end of guard rail at the bridge abutment apparently is a result of field punching, and the contractor has already ordered factory punched sections to overcome this condition.

I believe many of the problems encountered on this project will not reappear due to changes in our standards and other changes being studied, and I have issued instructions that all major freeway designs that we have completed or are nearing completion be checked and corrections made where unsafe conditions can be detected.

In addition, I am issuing instructions for our field engineers to review all projects presently under construction and make changes where necessary to eliminate these obvious hazards.

I will be happy to review this matter with you again at any time, and point out the specific action taken.

Sincerely,



J. E. Harwood, Deputy Commissioner
and Chief Engineer

Mr. DELIBERT. In summary, Mr. Harwood says that as a result of our presentation, they have ordered corrections on this project and the review of all major new freeway projects in the State. They have ordered changes in their standard plans consistent with modern safety practices and most importantly, they have ordered a safety training program for all personnel involved in these projects from the design stage through to completion.

This was certainly a heartening response from the Virginia department. But the problem, Mr. Chairman, is not limited to one State. In the past 3 weeks, center staff have visited newly constructed projects in 8 States, in addition to the 8 we visited last year while preparing our report.

/ We can report that to a greater or lesser extent than this project on I-95, highway safety design errors are appearing in all of these new projects in all of the States. Such a widespread problem is clear evidence that the administrative deficiencies now being recognized in Virginia exist in many other State highway departments and in the Federal Highway Administration as well.

/ We spent a great deal of time in the last 18 months researching these deficiencies at the Federal and State levels. To begin with, we found that most State highway departments have never had an adequate training program in the principles of roadside safety. We have been appalled at the lack of basic knowledge of safety design principles in some States.

This training must be carried to the personnel who are daily involved in the design, construction, maintenance, and inspection of these highways. Virginia's promise to implement such a program now—8 years after the roadside obstacle program was first described—is a reflection of this long-standing failure.

/ Where a few individuals in the highway department have had such training, they are usually the traffic and safety engineers; but we have found that the traffic and safety engineers are generally shunted off somewhere down the organizational chart where they have little opportunity and even less authority to review highway design plans at an early enough stage that important safety changes can be readily made.

/ We have also found that most State highway departments have very poor programs for the implementation of safety-related research. We certainly recognize, Mr. Chairman, that most departments do not have the funds to carry on a large scale program of crash-testing roadside appurtenances such as is done in Texas and California. But we were certainly dismayed to find that in the absence of such crash testing, most States also lack an adequate program to avail themselves of the research that is done.

/ Generally, there is no consistent effort in the State highway departments to evaluate research performed by others, whether it is by FHWA, the National Cooperative Highway Research program, or by other States and to determine its applicability to that particular State and change the State's standard plans to reflect modern practices.

Again, the fact that Virginia is doing this only at the urging of the center for auto safety is a reflection of this problem.

/ Finally, we found that in the face of these other problems, the Federal Highway Administration has not used its standard setting authority to hasten the advent of safety reforms. Periodically, Mr. Chairman, representatives of FHWA and AASHTO in testimony

before this and other committees have referred to the "safety standards" used in the construction of modern highways. It would be well to point out that what they are calling "standards" are usually nothing more than a set of guidelines and recommendations which the State highway departments "should" follow in their design and construction. Rarely are they mandatory, rarely do they state what practices a State "shall" follow. *standards not voluntary*

/In fact, in our interviews last year, one FHWA division engineer, questioned on this point, replied to us, "The State usually reads these things for us. If we tell them to do something, if they don't want to do it, they will get the thing out and read it to you and they will say 'It doesn't say "shall".'" /

In conclusion, it might be well to introduce the letter we received from the FHWA in response to our slides of I-95. The implications of the slides for the State's training, standard plans and other freeway projects should have been obvious to FHWA as it was to the State officials in Virginia. But the FHWA's entire response, Mr. Chairman, is to do a safety review of this one project. They seem content to ignore the larger implications.

[The letter referred to follows:]

U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL HIGHWAY ADMINISTRATION,
Washington, D.C., July 17, 1975.

Ms. LYNNE SMITH,
Center for Auto Safety, Dupont Circle Building, Washington, D.C.

DEAR Ms. SMITH: This will acknowledge your May 27 letter to Honorable William T. Coleman, Jr., Secretary of Transportation, regarding your slide presentation at a recent meeting of the National Highway Safety Advisory Committee.

/As you know, we have made the commitment that the Federal Highway Administration will do whatever is necessary within reasonable limits to make the corrections and adjustments needed to improve the safety features on the I-95 project immediately south of the Potomac River Bridge. Our Division Office in Richmond, with assistance from the Washington Highway Design and the Construction and Maintenance Divisions, will make a safety review of the project and initiate action for the corrections and improvements.

We have completed a thorough review of your "Yellow Book Road" report and will respond to you on it in the very near future.

Regarding Resolution No. 1 drawn up at the recent meeting of the National Highway Safety Advisory Committee, the Federal Highway Administration is presently reviewing the resolution.

Your interest in highway safety is appreciated.

Sincerely yours,

J. R. COUPAL, JR.,
Deputy Administrator.

Mr. DELIBERT. We were certainly gratified to see the actions taken by the State of Virginia. We certainly hope that the other States will follow suit. But it ought not to be left to the Center for Auto Safety to bring this about. This is precisely the task of the FHWA and one we hope they will soon get about.

That concludes our prepared testimony. We would like to submit a copy of our recent report "Implementation of the 1973 Highway Safety Improvement Programs, A Counter Report,"¹ together with an update showing the status of these programs as of the end of May.

We appreciate this opportunity to appear this morning and will be pleased to answer any questions from the committee.

Senator STAFFORD. We thank you for your testimony.

[Material supplied by Mr. Delibert follows:]

¹ Retained in committee files.

Center for Auto Safety

1223 Dupont Circle Building Washington, D.C. 20036 (202) 659-1126

IMPLEMENTATION OF THE 1973 HIGHWAY SAFETY IMPROVEMENT PROGRAMS: AN UPDATE

July 1975

Earlier this year the Center for Auto Safety prepared an analysis of the status of the 1973 Title II Safety Improvement Programs. A copy of that report, "Implementation of the 1973 Highway Safety Improvement Programs: A Counter-Report," is attached; summaries of significant findings precede each chapter. In the next few pages we will bring some of those findings up to date.

The general aim of the 1973 safety legislation was not new. The High Hazard Location Program, the Roadside Obstacle Elimination Program, and the Safer Roads Demonstration Program directed the states to perform much the same kind of safety work they have been urged to do since the beginnings of safety work in 1964. What was new about the 1973 legislation was that it attempted to deal with three main problems which had plagued all the safety programs since 1964: (1) the failure of most state highway departments to keep adequate traffic records for identifying hazardous highway locations; (2) the consequent failure of highway agencies to set rational priorities for

improvement work; and (3) the failure by most agencies to set aside specific funds for safety improvement work, so that such work had to compete for money with other, less urgent but more popular programs.

Unfortunately, despite legislative provisions intended to correct these problems, the Center's research indicates that the safety programs continue to be seriously hampered by similar problems. Perhaps the clearest indication of this continued failure is the fact that, as of the end of May, some 21 months after the start of the programs, 15 states have not yet even begun to obligate funds for one or more of the hazard removal programs. And many of the states that have begun have obligated only a small proportion of their available funds. We have prepared a chart (Attachment C-2) showing the percentages of available FY 1975 funds obligated by each state in three different safety programs.

One cause of this lag has been impoundment, and the curious way in which impoundment has been handled by FHWA. Even though Congress earmarks funds for the various parts of the highway program--so much for Interstates, so much for Primaries, so much for Roadside Obstacle Removal, and so on--impoundment is carried out without any such earmarking. A state simply loses a certain amount of its overall apportionment, and each state is then free to allocate this cutback among the various parts of the program in any way it wishes. The result is that the safety programs are still forced to compete with other aspects of the highway program for adequate funding.

✓ As an example: Suppose a particular state is to receive \$100 million in Federal-aid funds for all aspects of its highway program in a given year--Interstate, Primary, Secondary, Safety, and so on. The Administration withholds \$30 million of that. The state is free to say, "Well, they've withheld our safety improvement funds, but we still have our Interstate construction money." The Center in fact knows of one state in which the Highway Director, when confronted with a reporter's question about why the safety programs were proceeding so slowly, replied that the safety funds had been impounded! ✓

✓ FHWA's explanation for this two-year delay in obligation of safety funds is that these are new programs, and like all new Federal programs, take time to get off the ground. However, it is helpful to recall that most of the substance of these programs dates back to 1964, when the President called on FHWA and the states to undertake a large-scale safety improvement program; and to 1966, when the Congress directed the states and FHWA to organize systematic safety improvement work; and to 1972, when the National Highway Safety Advisory Committee urged FHWA to implement such work methodically and on a large scale. Thus, these programs are "new" in name only, and one could reasonably expect very rapid implementation. ✓

✓ Another important reason for the slow implementation of these programs has been the widespread confusion in FHWA and the states about the purpose of the programs and the funding available for them. During the past few months the Center has been monitoring the progress of the programs and we have found

one prominent state highway director--a former AASHTO president, in fact--who was under the impression that these programs have a 70/30 Federal/state matching ratio, when in fact they are 90/10. Another Highway Director we spoke with thought the Pavement Marking Demonstration Program was merely a program to try out new paints, something in which his state was not interested. The head of one state highway department thought the Pavement Marking Program was intended only for Federal-aid roads, when in fact the law clearly states that priority is to be given to rural roads not on any Federal-aid system. In another state, the Highway Director simply had no idea what we were talking about when we asked him about the safety improvement programs, and the head of that state's Highway Safety Program "explained" the state's slow progress in obligating safety construction funds by telling the Center that Congress did not provide any funds for the first year of these programs--when in fact Congress set aside \$175 million for them! /

These and other problems are described and documented in the attached report. Of course, the Center is not the only group concerned about the general neglect of safety work by FHWA and state highway agencies. Recently, the National Highway Safety Advisory Committee has expressed to Transportation Secretary Coleman its continuing concern "at the relatively slow rate of progress achieved by the Department and the states" in "obligating safety construction funds." And the Center calls to the Committee's attention a recent report by the General Accounting Office, entitled Unsafe Bridges on Federal-aid

Highways Need More Attention. The GAO has investigated FHWA's administration of one of the safety programs, the Bridge Replacement Program, 23 U.S.C. 144, and come to some conclusions regarding this program that are quite similar to the conclusions reached by the Center about other safety improvement programs. The Center trusts that the Committee will give both of these reports its informed attention.

* * * * *

HIGHWAY SAFETY IMPROVEMENT PROGRAMS
PERCENT OF FY 1975 APPORTIONMENTS
OBLIGATED AS OF MAY 31, 1975

STATE	HIGH HAZARD LOCATIONS	ROADSIDE OBSTACLES	SAFER ROADS DEMONSTRATION PROGRAM
	23 U.S.C. 152	23 U.S.C. 153	23 U.S.C. 405
ALABAMA	17.85%	1.36%	14.06%
ALASKA	150.48*	1.36	14.40
ARIZONA	0	53.03	0
ARKANSAS	31.26	0	6.87
CALIFORNIA	123.30*	36.90	11.31
COLORADO	0	6.01	26.29
CONNECTICUT	46.76	147.91*	31.73
DELAWARE	24.76	87.07	54.20
FLORIDA	102.16*	21.26	10.35
GEORGIA	0.18	93.02	168.53*
HAWAII	12.79	10.07	16.40
IDAHO	77.10	9.91	24.12
ILLINOIS	120.04*	68.53	26.10
INDIANA	44.14	117.19*	11.51
IOWA	108.60*	51.00	36.14
KANSAS	30.41	158.09*	63.43
KENTUCKY	0	22.41	2.65
LOUISIANA	156.50*	0	1.04
MAINE	118.37*	0	0.20
MARYLAND	232.19*	9.00	0.26
MASSACHUSETTS	21.74	118.44*	57.53
MICHIGAN	108.99*	85.46	25.82
MINNESOTA	105.51*	81.43	3.25
MISSISSIPPI	3.28	96.85	0
MISSOURI	49.55	11.98	19.72
MONTANA	47.41	59.31	178.70*
NEBRASKA	98.71	8.40	8.31
NEVADA	14.97	41.63	8.60
NEW HAMPSHIRE	46.26	90.61	0
NEW JERSEY	0	2.74	35.30
NEW MEXICO	20.48	13.79	12.65
NEW YORK	14.00	0.68	12.28

STATE	HIGH HAZARD LOCATIONS	ROADSIDE OBSTACLES	SAFER ROADS DEMONSTRATION PROGRAM
	23 U.S.C. 152	23 U.S.C. 153	23 U.S.C. 405
NORTH CAROLINA	42.46%	17.33%	22.07%
NORTH DAKOTA	152.89*	29.31	101.60*
OHIO	20.57	15.25	67.14
OKLAHOMA	3.47	0	0
OREGON	91.26	120.97*	27.39
PENNSYLVANIA	160.34*	28.00	44.16
RHODE ISLAND	18.23	52.79	0
SOUTH CAROLINA	43.83	139.04*	1.75
SOUTH DAKOTA	68.46	2.05	46.65
TENNESSEE	3.15	0.63	11.71
TEXAS	3.01	0	0
UTAH	90.03	10.38	31.90
VERMONT	0	33.74	30.20
VIRGINIA	123.39*	19.18	78.76
WASHINGTON	36.04	35.17	0.29
WEST VIRGINIA	29.52	10.00	3.56
WISCONSIN	79.77	50.56	42.12
WYOMING	81.01	25.31	19.60
DISTRICT OF COL.	-1.36**	9.52	73.00
PUERTO RICO	23.89	0	69.77

Compiled from data supplied by the
Federal Highway Administration

* Figures greater than 100% indicate that state has obligated all funds for current fiscal year plus money remaining from previous fiscal year or money advanced from next fiscal year.

** Negative (-) indicates that money previously committed has been removed from obligation.

Senator STAFFORD. The Chair wants to welcome Senator Domenici to the hearings. Senator, we are proposing to hear the remaining witnesses before we go to questions, if that is agreeable with you.

Senator DOMENICI. That is fine, Mr. Chairman.

Senator STAFFORD. Thank you.

The Chair will now ask Mr. Carlton Fisher of the National Conference of Governor's Highway Safety Representatives to proceed.

STATEMENT OF CARLTON FISHER, CHAIRMAN, NATIONAL CONFERENCE OF GOVERNORS' HIGHWAY SAFETY REPRESENTATIVES

Mr. FISHER. Thank you, Mr. Chairman.

I am testifying on behalf of the National Conference of Governor's Highway Safety Representatives today. With me is Mr. Joe Murphy from the District of Columbia, Mr. Jim Hill of the State of Arizona, Mr. Francis Colleton from the State of Massachusetts, Mr. Karsten Vieg from the State of Illinois, Ms. Pat Ehrlich from the State of Idaho.

Mr. Chairman, I will try to summarize extemporaneously. As I begin the testimony, I say without reservation and as forcefully as I can that the State 402 community highway safety program has been a success. I say that without reservation and without equivocation.

Our prepared remarks indicate six areas of success, but I think for the purposes of this summary that I will call to the Chair's attention two items. First, there has been greatly improved cooperation and coordination between the States and the local traffic safety officials.

Second, an item that, I think, the Congress and the Nation needs to know. We have an emergency medical service system in this country program today because of the highway safety program and for no other reason.

Since I don't have access to an awful lot of current national data I will try to demonstrate the success of the highway safety program with data from my region.

When the highway safety program started in 1966, the eight States in the southeastern region were lagging some 5 years behind the national average. Both Dr. Gregory and Governor Tiemann have talked about the rate being 5.7. That year the Southeastern States were somewhere around 6.7. It took us 5 years to get to that 5.7 mark. However, the eight Southeastern States are now setting the pace. Our record for the first 6 months of 1973-74 and 1975 follows. In 1973 we killed, in the region, 5,794 people. In 1974, we killed 4,608. That is a reduction of 24.7 percent. This year, 1975, in my region, we killed 4,329, a reduction of 6.1 percent.

I might hasten to add that the Nation as a whole is running 3.7 percent ahead of last year. I say without reservation, in spite of the current national increase, in my region and in this Nation, the program has been successful. From our standpoint there is no need for further argument on the success of the program.

The State-Federal relationship, quite frankly, has not been to our satisfaction and perhaps never will be. The things that have bothered us are in our prepared testimony. One thing, and we don't mean this facetiously, but as an example of the State-Federal relationship,

this Conference supports and is on record in support of safety belt laws. But somehow the administration in the interlock issue lost sight of the real world and did not consult States. It seemed as a result of the interlock decision that the wrath of the public fell upon us all. So I would like to suggest that the administration, Congress, and all of us work together to find some way to reintroduce this subject, use of safety belts and laws requiring their use, without bringing the wrath of the people down on us. After all, we are servants of the people and we can't force on the public a project which it neither wants nor desires. We agree with the administration that the use of the belt will save an untold number of lives.

We have addressed the standards in our statement and say that they were the best technology available in 1966. We think they should be reviewed. When the Congress required the administration to establish performance standards, you may have assigned the administration an impossible task. We are not sure that you can define performance in every standard, but we are willing to work with the administration if Congress uses the word performance and hopefully, sir, you would define what performance means.

With respect to the implementation of the standards I bring to your attention quickly a point that one of the NHTSA staff members pointed out—

Senator DOMENICI. One of who was it that did this?

Mr. FISHER. One of the NHTSA staff people in a recent address pointed out that the Federal contribution to the highway safety program was on the order of 1.5 to 3 percent. The point that I make is this. To say that we can impact and have high payoff for 1.5 or 3 percent of the total program is a misnomer. What we are doing with the highway safety program is adding about 1.5 to 3 percent to what the States effort is. To say that you can immediately impact safety with high payoff with this amount is, as I said, a misnomer and perhaps misleading.

To further illustrate the problem, it is said that for every \$40 in State and local investments, there is \$1 of additional Federal investment. What I am saying to you, sir, is, the States and communities can no longer afford to maintain a 40 to 1 ratio. The standards, I am submitting to you, have to be flexible enough to recognize this.

On sanctions, quite frankly we think that the administration, in some instances, may have gone outside the bounds of Congress in imposing the sanctions. For example, if I may quote quickly from the prepared testimony, in House Report 1799 of the 90th Congress, 2d session, Congress set forth what we refer to as the reasonable progress doctrine.

In applying a sanction procedure, the administrators derived a sanction from 23 U.S.C. 116, which imposes upon a State the duty to maintain its federally assisted highway construction projects. The rulemakers said, "By virtue of 402(d), section 116 applied to the State highway safety programs conducted pursuant to section 402."

In adopting section 116 to the highway safety context of section 402, we interpret the word "maintain" as meaning implement. Webster's dictionary defines the word "maintain" thusly: To keep or keep up, continue in or with, to keep in existence or continue. The word "implement" means to carry into effect, fulfill, accomplish, to provide with means for carrying into effect or fulfilling.

It is our understanding—that is, the members of this conference—that words in law have the same meaning ascribed to them as you find in everyday usage unless the law itself defines the word differently. How the rulemakers construed the word “maintain” to mean implement is beyond the comprehension of our membership.

I shall move hastily to 403 research and development, sir. We saw in a recent trade journal an article which bothers us. I don't know how true the article is, but we do bring it to your attention. The publication stated that the administration “does not believe that the 402 programing has been as responsive to utilizing research developed under 403, research and demonstration projects, as they should have been.”

What I want to say to you, sir, is we wholeheartedly agree with that statement. However, if it is an inference that States have not responded to 403 effort, then what I suggest to you is that the 403 effort has not really been germane to the States or the State programs. We have some other things to say in the written testimony on that.

On the 55-mile-an-hour speed limit, we as a conference endorse the 55-mile-an-hour limit, both from energy and safety standpoints. We are primarily concerned because of the safety benefits. What I wish to convey to you, sir, as honestly and as sincerely as I know how, is the dilemma of the American public. If John Q. Public were to meet the truth face to face on the 55-mile-an-hour and energy question, I am not sure he would recognize it. I am not sure that I would either.

What I am suggesting is, let's all get our ducks in a row and start conveying to the American public what the problem is and let's sing off the same song sheet and let's say it with one voice. Let's get the truth out through Federal agencies, the States, and local governments. That way we can impact this thing of 55 miles an hour.

I give that background to say this, sir, we will never be able to enforce the 55-mile-an-hour law or limit until we get, in my judgment, at least 85 percent of the population voluntarily complying. We have never in the history of this Nation been asked to enforce a law or a rule where a vast majority of the people have elected to ignore it.

We need to get an 85-percent voluntary compliance—the truth will help us get voluntary compliance—and then we might be able to enforce the law against the other 15 percent.

There are recommendations in the prepared testimony that I shall not go into, for I notice my time has almost expired. So to stay within the 15-minute rule, I best end my remarks. I appreciate the opportunity of appearing before you.

Senator STAFFORD. Thank you very much for your very helpful testimony, Mr. Fisher.

[Mr. Fisher's prepared statement follows:]

STATEMENT
OF
THE NATIONAL CONFERENCE OF GOVERNORS'
HIGHWAY SAFETY REPRESENTATIVES
BEFORE THE
TRANSPORTATION SUBCOMMITTEE
OF THE
COMMITTEE ON PUBLIC WORKS OF THE U.S. SENATE
BY
CARLTON FISHER
CHAIRMAN, NCGHSR
JULY 28, 1975

INTRODUCTION

Mr. Chairman, I am Carlton Fisher, Governor's Highway Safety Representative from Georgia and Chairman of the National Conference of Governors' Highway Safety Representatives, an organization composed of the Governor's Highway Safety Representatives of the several States. The Conference is dedicated to the cause of highway safety and one of its purposes is to develop and improve program administration, particularly in response to the Highway Safety Act of 1966, as amended.

Today, I testify in my capacity as Chairman on behalf of NCGHSR. My remarks will be limited to the 55 MPH issue and the "402" State and Community Program -- the software side if you please. I will not address the categorical grants of the Highway Safety Act of 1973 dealing with Pavement Marking Demonstration Programs, Projects for High Hazard Locations, Programs for the Elimination of Roadside Obstacles, etc. For the most part, these programs have been assigned to State Highway Departments and are, therefore, not the direct responsibility of the Governor's Highway Safety Representative. I will, however, entertain questions on the categorical grants if you desire.

"402" SUCCESS

I want to first state, as forcefully and unequivocally as I know how, that the "402" State and Community Highway Safety Program has been and is a success. The program has made significant contributions to highway safety. Among these are:

- (1) the development of State and local traffic safety management expertise and the resultant assignment of specific responsibility;
- (2) increased awareness of, and concentration on, traffic safety problems at all levels of State and local government;
- (3) greatly improved cooperation and coordination between State and local traffic safety officials;

- (4) improved laws and more consistent enforcement;
- (5) accelerated and improved traffic engineering services at the local level; and
- (6) improvement nationally in the emergency medical service system.

In addition to the program achievements, I call your attention to Table I and Figure 1.

From 1956 through 1965, a ten year period, the death rate per 100 million vehicle miles dropped from 6.28 to 5.54, a reduction of 11.8 percent. In 1966, the fatality rate rose from 5.54 the previous year to 5.70, an increase of 2.9 percent. From 1966 through 1973, the death rate dropped from 5.70 to 4.27, a reduction of 25.1 percent. In 1974, the year of the energy crisis and reduced speeds, the death rate dropped to a 3.58, the lowest ever. The death rate per 100 million miles travelled has been reduced a whopping 37.2 percent since 1966. These reductions have been achieved in the face of increased motor vehicle use and an ever increasing number of drivers.

TABLE I
MOTOR VEHICLE DEATHS AND DEATH RATES,
VEHICLE USE AND NUMBER OF DRIVERS
FOR 1956-1974

Year	Motor Vehicle Deaths	No. of Vehicles (Millions)	Vehicle Miles (Billions)	Miles per Vehicle	No. of Drivers (Millions)	Death Rate**
1956	39,628	65.2	631	9687	77.9	6.28
1957	38,702	67.6	647	9571	79.6	5.98
1958	36,981	68.8	665	9666	81.5	5.56
1959	37,910	72.1	700	9709	84.5	5.41
1960	38,137	74.5	719	9651	87.4	5.31
1961	38,091	76.4	738	9660	88.9	5.16
1962	40,804	79.7	767	9624	92.0	5.32
1963	43,564	83.5	805	9641	93.7	5.41
1964	47,700	87.3	847	9702	95.6	5.63
1965	49,163	91.8	888	9673	99.0	5.54

TABLE I
CONTINUED

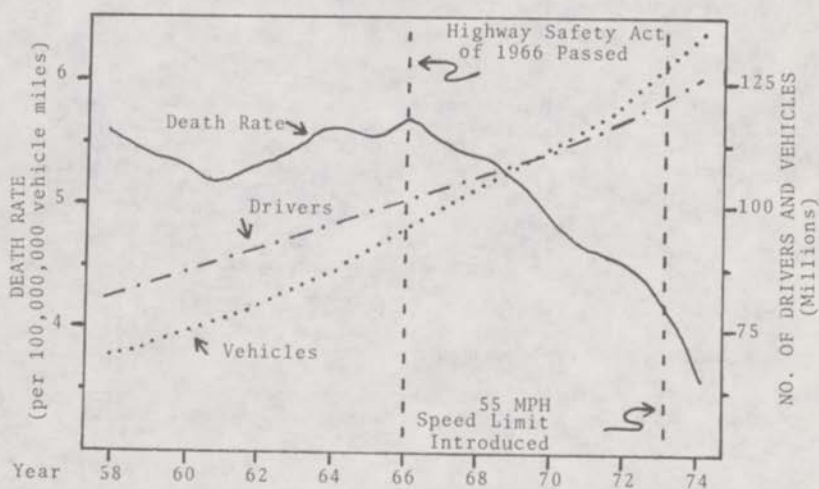
1966	53,041	95.9	930	9698	101.0	5.70
1967	52,924	98.9	962	9727	103.2	5.50
1968	54,862	103.1	1016	9855	105.4	5.40
1969	55,791	107.4	1071	9972	108.3	5.21
1970	54,800	111.2	1120	10081	111.5	4.89
1971	54,700	116.3	1186	10198	114.4	4.61
1972	56,600	121.4	1250	10297	118.2	4.53
1973	55,800	128.7	1306	10148	122.4	4.27
1974*	46,200	135.0	1270	9407	126.0	3.58

SOURCE: NATIONAL SAFETY COUNCIL

* preliminary estimates

** per 100,000,000 miles travelled

FIGURE I

ANNUAL DEATH RATE COMPARED WITH
DRIVERS AND VEHICLES - 1956-1974

I acknowledge the fact that fatality rates are confusing to the layman and sometimes challenged by the experts as appropriate measures. However, fatality rates, as a measure, have been internationally accepted and have been used for years. The National Conference of Governors' Highway Safety Representatives holds that fatality rates are good measurements and it not only claims progress -- its members have demonstrated progress on the basis of rate reductions. NCGHSR does not attribute the accelerated reduction to chance or divine intervention -- it is the product of State effort and the "402" Safety Program.

I could use the entire time allotted to elaborate on the advances and success stories resulting from the "402" State and Community Program. However, I prefer to utilize the time to bring to the Committee's attention issues which have troubled the Conference and the individual Governor's Highway Safety Representatives over the years. Quite frankly, the Conference, the States and the safety agencies, NHTSA and FHWA, have operated as adversaries most of the time. I am pleased to say, however, that recent events indicate that the ice is thawing and a new day may be on the horizon. While the Conference awaits that day, I will share a few problems with you and suggest remedies for your consideration.

STATE/FEDERAL RELATIONSHIP

Some of the most important things the Conference has learned from the "402" State and Community Program concern the traffic safety problem itself. The Conference acknowledges the existence of a "national traffic safety problem", however, our members contend that the national problem is only definable at the State and local level. Rarely can local traffic safety problems be solved by quick and simple emphasis programs, earmarked funds, or other forms of magic. Those who argue convincingly that they have a simple solution to impacting any large portion of the problem invariably fall into one of two categories: (1) someone who has a product to sell or (2) someone who just does not understand the true nature and scope of the traffic safety problem.

Traffic safety problems of the States and local communities are best understood by State and local officials. Neither the problems nor the solutions can be inferred by the

Administration from the aggregation of nationwide statistics. To do so obscures the problem of one or several States not to mention local communities. To really get a handle on the problems, the Administration should reach out, which it has not done with any degree of consistency yet, to the States, and through the States, to the local level to really learn what the problems are. Until this is done, the Administration will be unable to make effective program decisions and meaningful representative recommendations to the Congress in terms of programs or budgets.

Had the Administration reached out and sampled the feelings of the public on safety belts, it could not have conscientiously mandated the interlock system with the attendant irritant of a constant buzz activated by a child's touch, a poodle or bag of groceries. Safety belts, as a result of that decision, were dealt an almost fatal blow. Yet, the National Conference of Governors' Highway Safety Representatives agrees with the Administration that 100 percent use of safety belts will save thousands of lives each year. The Conference would like for the Administration and the Congress to join it in finding ways to increase safety belt usage without bringing the wrath of the public down upon us all.

We, the members of the Conference, are, after all, servants of the people and we cannot force the public to accept a product which it neither wants nor desires. In the same vein, all highway safety programs must be finely balanced in what is good for the public's safety and what the public will accept. To know where this balance lies will require an attentive ear on the part of the Administration and careful realistic planning on the part of the States and the National Conference of Governors' Highway Safety Representatives. States are prepared to advance the plans if the Administration will lend its ear.

The Administration controls research, decision making, planning and budgeting, standard development, sanction application and various forms of rulemaking. All these processes take place without serious consideration of State and local knowledge of problems or needs and sometimes the processes border on deception. For example, the States submitted the Comprehensive Plans in 1972 in accordance with Volume 102, Highway Safety Program Manual. There was no hint that the four year plan would become a binding document upon the States. The States were told that the plan was its best estimates and subject to revision each year. States should have known better for the 13 mandatory requirements for the Comprehensive Plans were issued in September, 1972. (Appendix A).

After the States complied with the mandatory requirements in order to gain approval of their Plans, the two Administrations, FHWA and NHTSA, some two years later added Part 1206 to Title 23, CFR, effective May 31, 1974. (Appendix C). In that regulation, Highway Safety Program was defined as follows: "Highway Safety Program" means a State program consisting of both (1) a Comprehensive Highway Safety Plan, a multi-year plan of the State and its political subdivisions for implementing the highway safety program standards and (2) an Annual Highway Safety Work Program, a program detailing the activities and proposed expenditures of the State and its political subdivisions for implementing selected components of the State's Comprehensive Highway Safety Plan during a single year." Suddenly, by definition, the States best estimates were cast in concrete -- the mandatory requirements became the States and if States do not meet the deadlines which they were coerced to place in the plans, they are subject to sanctions which are discussed later in my testimony. Incidentally, the regulations were issued on May 24, 1974 in the public interest to become effective on May 31, 1974.

Further, the Conference has reason to believe that the contents of the Comprehensive Plans have never been arrayed to assess needs on a national basis nor have they been used in the budgetary process. If the Administration has used the Comprehensive Plans for any reason other than to threaten a State with sanctions, the Conference would certainly like to be corrected and shown how the plans have been used in the Administration's decision making process.

Members of the Conference have discussed these points in the past with Administration Personnel amicably and harmoniously. After all the discussion, the Administration's actions have convinced the Conference members that regardless of what States have to offer, it will call the signals even if it means the ball carrier must run the wrong way.

TRAFFIC SAFETY STANDARDS

/Section 402, Chapter 4, of Title 23 USC states that "Each State shall have a highway safety program approved by the Secretary, designed to reduce traffic accidents and deaths, injuries, and property damage...in accordance with uniform standards promulgated by the Secretary. Such uniform standards

shall be expressed in terms of performance criteria". The present standards are more in the nature of elements and are not performance oriented. The standards were based on 1966 and earlier technology and in most instances have not been validated in terms of reducing traffic accidents and deaths. A State, in other words, has no guarantee of reducing traffic deaths or accidents if it implements a standard, a portion of a standard, or the 13 "must items" listed in Appendix A. The Administration has missed the mark in the Conference's opinion in defining performance criteria and the Congress may have assigned the Administration an impossible task. However, members of the Conference are willing to work with and assist the Administration in what it understands to be performance criteria.

The two Administrations have applied pressure on the States to implement certain standards or standard elements within a certain time frame. (Appendix A & B). Of the two Administrations, NHTSA has been more aggressive in pushing its 13 "must items" than FHWA has with its National Emphasis Programs. Recent events and the posture of the two agencies toward each other lead us to believe that a change is in the wind. This belief is based on the fact that NHTSA's aggressive position has caused some States, in the mind of FHWA, to over emphasize the 14+ standards and under emphasize the 3+ standards. If both agencies apply the pressures States are accustomed to receiving from NHTSA they, quite frankly, cannot manage the program as presently funded and administered without eventually running into sanctions or threat of sanctions.

/ If I may divert your attention from the standards for a moment, the problem can be more fully outlined and understood. By DOT's estimate, the federal contribution to the total "402" State and Community program is on the order of 1 1/2 - 3%./ Gentlemen, the time has come for the Administration to provide States with more money if it expects or anticipates a high degree of compliance with its prescription list. / States will do what they can to protect their citizens but the day of the seed money approach is fast coming to an end and anyone who testifies that you can get high payoff for 1 1/2 - 3% of the total program is totally misinformed. /

In a recent speech delivered by the Associate Administrator for Traffic Safety Programs at the 55 MPH Speed Limit Conference in Washington, D. C., he said, "there was an average annual Federal expenditure increase of \$3.8 million. The States and local communities, however, responded with an annual increase of 146 million dollars in State and local monies -- a multiplier of almost 40 to one." The Conference has no reason to refute the Associate Administrator's statement, but I will tell you this, the day is fast approaching when the States and local communities will no longer be able to invest

anything near \$40.00 for every \$1.00 of additional federal investment.

In the long haul, a State may be forced to ignore some of the more expensive unproven "must items" and National Emphasis programs and suffer the consequences of a sanction. After all, the Administration has never requested the amounts authorized and apparently expects the States to bear the financial burden of its mandates. In fact the Administration requested about half of what it could have requested for fiscal year 1976.

The Highway Users Federation in its testimony before the Senate Transportation Subcommittee, Committee on Appropriations on June 25, 1975 made the following statement. "Taking only the declining value of the dollar into consideration, a program of \$120 million would be required in fiscal 1976 to equal the fiscal 1973 level of \$95 million." This statement does not consider the money earmarked for incentive grants and Section 406 grants authorized in 1975 which, incidently, is, in many instances, replacing State dollars already invested on a continuing basis in school bus driver training programs.

Let us now return to the standards. Under present policy, a failure to implement an emphasis item or a standard element may result in a State being sanctioned although the State's total program may be effective and the State may have received incentive funds for a job well done. This situation is undesirable as it will result in the elimination or, at best, a material reduction in the State's traffic safety program.

To rectify the problem, the National Conference of Governors' Highway Safety Representatives hopes that a State/Federal partnership can be authorized and formed to begin work on updating and revising the uniform highway safety program standards. Ideally, from the Conference's point of view, the standards should be developed in three levels:

- (1) define those elements identified and documented as essential to any State's highway safety program. The elements would be required in every State and become the foundation of the highway safety program;
- (2) define those elements, activities and programs that are performance oriented, i.e., if you implement the element, activity or program in a given area,

what are the expected results and what are the start-up and recurring costs. These elements, activities and programs could be catalogued in the Regional Offices of NHTSA and FHWA and made available to States and communities as specific problems are identified. This level of standard development is what the Conference calls the "cookbook" with recipes for survival;

- (3) after a State has implemented the essential elements, it would have the prerogative of using the "cookbook" or it could develop additional countermeasures and identify its own problems. If the State, through its own management program by whatever name called, can impact its highway safety problems, the State should be allowed to proceed without being hindered unnecessarily by the Administration. Of course, any State that elected to determine its own performance objectives and countermeasures would be accountable for its progress.

NCGHSR believes the three level approach will eliminate the need, if the need ever in fact existed, for "must items", "hang tough items" or "National Emphasis Programs". The tri-level standards will provide flexibility and place the burden of implementing traffic safety programs on the State and in communities where traffic crashes happen.

SANCTIONS

Paragraph 402(d) of 23 USC provides that "all provisions of Chapter 1 of this Title that are applicable to Federal-Aid primary highway funds other than provisions relating to the apportionment formula and provisions limiting the expenditures of such funds to the Federal-Aid Systems shall apply to highway safety funds authorized to be apportioned to carry out this section, except as determined by the Secretary to be inconsistent with this section...". This section has been a source of confusion and dispute among the Governors' Representatives, NHTSA and FHWA. We constantly debate and sometimes argue the meaning of the terms "highway safety project" and "highway

safety program". We also debate what provisions of Chapter 1 are inconsistent with 23 USC 402. The debate is not only among the Governors' Representatives; it exists in and between NHTSA and FHWA too. The debate among ourselves has little impact on the program, however, the debate between FHWA and NHTSA often creates voids, time delays and indecisiveness.

The Conference believes that DOT should follow congressional intent in interpreting 23 USC 402(d) and other sections with reference to sanctions and administration. In its conference report on the Federal-Aid Highway Act of 1968, H.R. 1799, 90th Congress Second Session, Congress clearly stated its policy: "Based on the testimony of the Department of Transportation before the House, it is clearly understood by the Public Works Committee of both the Senate and House of Representatives that, because of the nature and scope of the highway safety program, its high eventual cost and the limited federal funds currently available for it, any State will be considered in compliance and therefore not subject to penalty if it is making reasonable progress on the program standards". Further, in a recent court decision, the court recognized the reasonable progress rule as stated by Congress. (Appendix D). Yet, the Administrators of FHWA and NHTSA published rules of procedure for invoking sanctions under the Highway Safety Act of 1966 (Appendix C) which appear to exceed the intent of Congress as well as the provisions of law. For example, the Administrators derived a sanction from 23 USC 116 which imposes upon a State the duty to "maintain" its Federally-assisted highway construction projects. The rulemakers said, "by virtue of 402(d) section 116 applies to the State highway safety programs conducted pursuant to section 402. In adapting section 116 to the highway safety context of section 402, we interpret the term 'maintain' as meaning 'implement'."

Webster's New World Dictionary defines the word "maintain" thusly: to keep or keep up; continue in or with; carry on; to keep in existence or continuance. The word "implement" means to carry into effect; fulfill; accomplish; to provide with the means for carrying into effect or fulfilling.

It is NCGHSR's understanding that words in law have the meaning ascribed to them in everyday usage unless defined differently in the law. How the rulemakers construed the word "maintain" to mean "implement" is beyond the comprehension of the members of the Conference. At any rate, the sanctions in 23 USC 116 apply to each State by virtue of the Administrators construing the word "maintain" to mean "implement" whether Congress intended it to apply or not.

The National Conference of Governors' Highway Safety Representatives believes the basis for sanctions should be on total program performance. How can one determine reasonable progress without considering the total program? The act of withholding highway safety funds for noncompliance with a standard element is, in and of itself, self defeating. Until 1966, the missing ingredient in traffic safety had been the coordination function and all indications point to the fact that the coordination effort has had its effect on the problem. Withholding of highway safety funds from a State would eliminate the coordinating State agency, the only agency uniquely qualified to take the action necessary to qualify the State for reinstatement after the sanction is invoked.

The highway safety program is so broad and so complex that it is not feasible to eliminate an entire program for non-compliance in one standard or in some cases a portion of a standard. Puerto Rico, for example, has been under threat of sanction because its presumptive evidence law specifies a blood alcohol content (BAC) of 0.15 rather than 0.10. Do not misunderstand me, the BAC level is important and most Conference members agree that 0.08 is a desirable threshold. However, it is only a portion of the alcohol safety program. A comprehensive alcohol safety program requires cooperation of enforcement, prosecution, adjudication, punishment, rehabilitation and education. The difference between 0.15 and 0.10 somehow seems insignificant, at the moment, when the Administration knows that the average BAC at the time of arrest in the most aggressive and effective alcohol enforcement program is approximately 0.18. Why should a State be sanctioned when nationwide we are not yet arresting offenders in any appreciable number at the 0.10 level?

As ironic as it may seem, while Puerto Rico was being threatened on the one hand, it received an incentive bonus on the other as the only State to have enacted a compulsory seat belt law. Several other States with sanction deadlines drawing near have recently received their incentive bonuses for significant fatality rate reductions.

The application of the sanction to withhold construction funds should be considered only in extreme cases when a State is showing no progress at all. The States of Alabama, Arizona, and Tennessee have implemented programs under the Vehicle and Cost Savings Act to determine the validity of diagnostic vehicle inspection and the cost of vehicle operation. These States have been informed that they must adopt periodic motor vehicle inspection by June 30, 1975. In their application

for projects under the Act, these States indicated that they would use the data from the programs to gain support for statewide motor vehicle inspection. To withhold funds for construction, in these instances, would add insult to injury and be devastating to the States.

403 HIGHWAY SAFETY RESEARCH AND DEVELOPMENT

States and communities are prohibited from spending "402" funds for research and to date, the information derived from the 403 program has fallen short of fulfilling the needs of the State administered "402" program. Further, the National Conference of Governors' Highway Safety Representatives is concerned with the manner in which 403 projects are administered and the validity of the limited information we have received thus far. Specific points of concern are:

- (1) The Administration has not worked with State and local traffic safety personnel to identify problems and potential solutions;
- (2) Section 403 projects often do not consider real world conditions nor do they develop the type of information that applies in real world situations at the State and local level;
- (3) The Administration has in the past placed 403 projects in some States without the concurrence, and sometimes without the prior knowledge of the Governor's Highway Safety Representative. The members of the Conference recognize that contract authority resides with the Administration, but common sense would have dictated that the Administration consult with the Governor's Safety Representative and at least seek his concurrence.
- (4) Recent publications have stated that the Administration "does not believe that the "402" programming has been as responsive to utilizing research developed under "403" (research and demonstration) projects as they should have been." The Administration

apparently believes that the best way to vindicate itself for lack of progress in the "403" area is to shift the blame to "402" programs and the States. And why not? It has worked in the past, but the plain truth is, most of the information derived from "403" effort is not readily adaptable or germane to a State Highway Safety Program. Moreover, some States cannot obtain information. Texas and Massachusetts, for example, have not been able to obtain the results of "403" projects in their States, the STEP project in El Paso and the Multidisciplinary Accident Investigation Project in Boston.

- (5) Rarely have States been able to initiate or submit an acceptable "403" program to the Administration. In all fairness, I must point out that FHWA solicits research proposals, but to the best of my knowledge, NHTSA has never solicited a problem statement from the States nor has it given any indication that it intends to do so.

55 MPH NATIONAL SPEED LIMIT

The 55 MPH national speed limit is heartily endorsed by the Conference as both a lifesaving and energy conservation measure. NCGHSR's primary interest, however, lies in the life-saving potential of the 55 MPH limit. Because of the life-saving potential, members of NCGHSR will vigorously pursue full citizen compliance on the streets and highways of the several States. The Governor's Highway Safety Representative, police agencies and State Highway Departments cannot, however, do the job alone and the mere publication of a federal regulation requiring States to enforce the 55 MPH limit will never get the job done.

Until now, States have never been asked, much less required, to enforce a rule that the vast majority of the population has chosen to ignore. If you expect or anticipate compliance through enforcement alone, we are doomed to failure. I submit to you that the 55 MPH limit cannot be enforced until at least 85% of the driving population voluntarily complies. Policemen and the courts may then be able to force compliance of the remaining 15% if the manpower is available to issue citations and hear the cases. At the moment, manpower is not

available in the States to adequately enforce even at the 15% level.

Government is not doing any kind of job in convincing John Q. Public that 55 MPH is in the interest of this great nation of ours. If anything, he is confused and confounded and would not recognize the truth if he met the truth face to face. I am not sure I would. The public needs to be informed of the truth and government agencies, at all levels, concerned with energy conservation and highway safety should be singing the truth off the same song sheet. In the opinion of the Conference, the issues of energy conservation and safety are inseparable and a high degree of voluntary compliance with the 55 MPH limit along with some enforcement will enhance both.

RECOMMENDATIONS

As I close my remarks with recommendations, I think it appropriate to cite the words of our founding fathers. They said, "all experience has shown that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed."

The members of NCGHSR firmly believe that the citizens of this nation have suffered enough on our streets and highways. It is time for all of us, FHWA, NHTSA, States and communities, to right the wrongs to which our citizens are accustomed and work together for the common good of every citizen who elects to walk, ride or drive on any highway or street in our nation. The bigness and complexity of our nation's highway safety problems leaves no room for bureaucratic nonsense at the Federal, State or local level. The Conference, therefore, in the spirit stated above recommends the following:

- (1) The Administration should keep its commitments to States and not utilize "after the fact" rulemaking to justify its actions;
- (2) The Administration should work hand-in-hand with the States to develop meaningful realistic recommendations to Congress on programs and budgets;
- (3) The standards should be reassessed and re-valuated along the lines recommended by NCGHSR:

- (4) The Administration and Congress should provide additional financial assistance to the States and realistic time frames to change institutions if the Administration continues to mandate compulsory programs requiring institutional changes and heavy costs;
- (5) Sanctions, if applied, should be proportional to the degree of noncompliance and based on total program performance;
- (6) The Administration in all cases should follow the reasonable progress doctrine established by Congress and affirmed by the courts in its consideration of sanctions;
- (7) The Administrators of FHWA and NHTSA should manage the "402" program as one program, answer States' questions in a reasonable time frame and make requests with enough lead time for States to respond intelligently;
- (8) NCGHSR and the Administration should continue to work together to resolve the issues which have, in past, created adversary relationships.

NCGHSR, in addition to the general recommendations above, offers the following as specific recommendations:

- (1) All provisions of Chapter 1, 23 USC, that Congress intends to apply to the "402" highway safety program should be specifically incorporated in Chapter 4 and section 402(d) should be amended by striking the provisions making all of Chapter 1 applicable to the highway safety program except those deemed by secretarial discretion to be inconsistent;
- (2) Congress should define the terms "highway safety program" and "highway safety project" to avoid any misinterpretation of the terms;
- (3) Congress should consider making a portion of the "403" research and demonstration

funds available to the States or, at least, grant the States a voice in what should be researched and/or demonstrated;

- (4) Congress should restate its reasonable progress doctrine in terms and language that leaves no room for doubt or debate on what is meant by reasonable progress;
- (5) Congress should authorize a national public education program aimed at energy conservation, voluntary compliance with the 55 MPH limit and highway safety. The program should be jointly managed by the federal agencies involved and States should supplement the national effort. Congress should also consider an additional authorization of funds to supplement State and local enforcement of the 55 MPH limit. This recommendation is advanced in the belief that it would be much more effective in achieving compliance with the 55 MPH limit than individual State programs or federal regulations mandating enforcement in a certain way. In short, enforcement alone will not achieve the desired result.

Mr. Chairman, the Conference's statement and recommendations are not intended as criticism of individuals; its purpose and intent is to surface and expose problems in the highway safety program, as the members of this Conference perceive them, in the hope that the problems can be resolved and the safety team strengthened. Our specific recommendations for changes in the law are advanced with the firm conviction that the Administration has misinterpreted Congressional intent in administering the law, therefore, some of its rules, regulations and directives have placed burdens on the States which Congress never intended. If we are wrong, we stand corrected.

You have been most attentive and I depart with full confidence that the Conference's thoughts, complaints, ideas and recommendations will receive appropriate attention from you and the Committee. On behalf of the membership of the National Conference of Governors' Highway Safety Representatives, I thank you, Mr. Chairman and members of the Subcommittee.

APPENDIX A

FORM HS-121 (REV. 1-76)

UNITED STATES GOVERNMENT

U.S. DEPARTMENT OF TRANSPORTATION

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Region IV

Memorandum

TO : Governors' Representatives
Highway Safety Programs

DATE: September 5, 1972

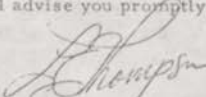
FROM : Regional Administrator
Atlanta, Georgia

In reply refer to:

SUBJECT: Mandatory Requirements for Comprehensive Highway Safety Plans

Word has been received that the approvability of your Comprehensive Plan may well depend upon the inclusion of Program Element Plans that will schedule the accomplishment of certain specific performance goals. In the immediate future your Governor will receive a letter from Secretary Volpe, and you will receive a letter from Administrator Toms more specifically discussing these required inclusions.

As advance notice of the subjects involved, I am enclosing a list of thirteen items identified at the recent meeting of the Executive Committee of the NGHSR. As far as I know at this time, accomplishment of the first three items will be required; as I receive additional information on this, I will advise you promptly.



L. E. Thompson

Enclosure

Addressees:

Mr. R. T. Simpson, Alabama
Mr. J. D. Wright, Jr., Florida
Mr. Carlton Fisher, Georgia ✓
Mr. J. W. Hughes, Kentucky
Mr. W. S. Moore, Mississippi
Mr. E. L. Peters, Jr., North Carolina
Mr. R. J. Barnick, South Carolina
Mr. L. M. Ellis, Tennessee



BUY U.S. SAVINGS BONDS REGULARLY ON THE PAYROLL SAVINGS PLAN

2-01

AREAS FOR SPECIFIC ATTENTION

1. Motorcycle Safety Helmet Legislation A fully effective helmet law for motorcycle operators and passengers be adopted by the end of your next general session of the legislature and effectively implemented within one calendar year from passage.
2. Blood Alcohol Concentration The presumptive or prima facie blood alcohol concentration set at 0.10 percent or lower. Legislative action to be completed by the end of your next general session of the legislature and effectively implemented within one calendar year from passage.
3. Classified Drivers License A classified driver's licensing system utilizing the one license concept to be adopted by the end of the second general session of your legislature and effectively implemented within one calendar year from passage.
4. Motor Vehicle Inspection A system for periodic inspection of all vehicles or an acceptable alternative program must be in operation by 1975. This would coincide with requirements of the Environmental Protection Agency.
5. Uniform Rules of the Road State be in substantial conformance with the current edition of Chapter 11 Uniform Vehicle Code by January 1, 1975.
6. Driver License Advisory Boards A fully functioning Driver License Advisory Board, i.e., Medical Advisory Boards by January 1, 1974.
7. Reporting of Traffic Court Convictions A minimum of 95 percent of convictions reported by the traffic courts to the State traffic records system by January 1, 1975.
8. Emergency Medical Services Implementation of a fully operational comprehensive EMS plan, including a regulated training and certification program for ambulance attendants within one calendar year of the close of the next general session of your legislature.
9. Periodic Driver Reexamination A periodic reexamination program including vision and knowledge testing at least once every four years must be in operation within one calendar year of the close of the second general session of your legislature.
10. School Bus Safety Each State provide a school bus safety administrator and provide training for all school bus drivers by January 1, 1974.
11. Selective Traffic Law Enforcement Each State establish and implement procedures for the selective assignment of trained personnel to supervise vehicular and pedestrian traffic movement. The program is to be implemented in all State patrol organizations and cities over 50,000 population by January 1, 1974.

Copy 13 must Standards
1441

12. Driver Improvement Programs Each State establish and fully implement a driver improvement program, responding to all classes of driver deficiencies by January 1, 1975.
13. Blood Alcohol Concentration Testing Systems established to determine the BAC's of drivers and pedestrians (over 15 years of age) who die within 4 hours after a traffic crash. The system to be implemented within one calendar year of the close of the next general session of your legislature.

APPENDIX B

Form FHWA 121 (Rev. 7-72)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

DATE: Oct. 26, 1972

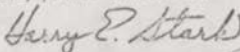
SUBJECT: Highway Safety Comprehensive Plan -
FHWA National Emphasis ProgramIn reply
refer to: 04-HP.3FROM: Regional Federal Highway Administrator
Atlanta, GeorgiaTO: Governor's Representatives
Highway Safety Programs

Recent correspondence to you from NHTSA's Regional Administrator has identified a list of 13 items which, if approved by the Secretary, would become programming prerequisites for approval of the Comprehensive Plan. A similar format of required activities related to the FHWA Safety Standards area was suggested, but our Office of Highway Safety has decided that action at this time would be both inappropriate and untimely. Although consideration of sanctions as provided by the Safety Act is a real possibility in the future if implementation is lagging, we do not consider use of blanket prerequisites at this late date to be advantageous.

FHWA guidelines for development of the Comprehensive Plan remain as outlined in Volume 102, Highway Safety Program Manual, Chapter II, paragraphs 3b and 3c. We will be expecting the States to indicate how they propose to meet the requirements of the FHWA National Emphasis Program or to justify omission of any part of it. Details of the Emphasis Program objectives can be found in the FHWA Program Management Guide, Volume 2, Chapter II.

For your information and use, we are enclosing guidelines which will be the basis for our review of each of the States' Comprehensive Plans. In addition, we are providing you with a copy of a timetable which will be adhered to for review and approval of the Comprehensive Plan and the FY 1974 Annual Work Program.

If we can be of assistance at any time, please contact us.



Harry E. Stark

Enclosures

Addressee:
Mr. E. T. Simpson, Alabama

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

HIGHWAY SAFETY PROGRAM MANAGEMENT GUIDE

Volume	2 - FHWA SAFETY PROGRAM GOALS, OBJECTIVES AND NATIONAL EMPHASIS PROGRAM	Transmittal 2
Chapter	II - National Emphasis Program	February 14, 1972

(HS-10)

- Par.
1. Introduction
 2. Emphasis Program
 - a. Accurate Identification of Accident Locations
 - b. Traffic Engineering Capability
 - c. Skid Accident Reduction Program
 - d. Uniform Regulatory and Warning Signs
 - e. Pedestrian Crossing Program
 3. Program Appraisal

1. INTRODUCTION

The National Emphasis Program focuses attention on features of the highway related Standards which can produce the greatest reduction in traffic deaths, injuries and property damage in the shortest possible time. The emphasis program is designed to provide the basic capability necessary to identify problem areas and develop corrective measures for all streets and highways. This program, with its overall target date of December 31, 1975, is to be used as a desirable national goal. Where implementation of national emphasis program features has been accomplished, alternative activities should be selected. The National Emphasis Program will be revised from time to time to reflect implemented features and new emphasis areas.

2. EMPHASIS PROGRAM

a. Accurate Identification of Accident Locations - By December 31, 1973, all States should be able to accurately identify accident locations to within one-tenth of a mile in rural areas and to within 100 feet in urban areas on their Federal-aid and State highway systems. The reference system and accident reference file should be designed and maintained to permit rapid entry and retrieval of data in a form useable by engineers and others in the development of appropriate countermeasures and be compatible with other information in the Statewide traffic records system. By December 31, 1975, this same accuracy should be obtained for all public roads within each State.

b. Traffic Engineering Capability - Traffic engineering expertise should be available to all jurisdictions within the State having responsibility for public roads. This expertise can be provided through training of existing employees, employment of qualified personnel, or part-time consulting services from public or private agencies. By December 31, 1975, this capability should be established in all cities with a population of 50,000 or more, and all counties of 250,000 or more. Cities of over 25,000 population should have the traffic engineering capability as defined in Highway Safety Program Manual (HSPM) Volume 13 within ten years.

c. Skid Accident Reduction Program - Each State should inventory the Federal-aid and State highway systems for skid resistance. A program should be prepared which establishes priorities for correcting locations with a disproportionately high percentage of skidding accidents and for pavements where the coefficient of friction is less than the recommended minimum Skid Numbers (SN) included in HSPM Volume 12. By December 31, 1975, a Statewide inventory for skid resistance should be established and in operation. This inventory should encompass all paved roads with a posted speed limit of 40 miles per hour or higher.

d. Uniform Regulatory and Warning Signs - Each State should bring all warning and regulatory signs into conformance with the provisions of the 1971 edition of the Manual on Uniform Traffic Control Devices (MUTCD). States should achieve MUTCD conformity by December 31, 1974.

e. Pedestrian Crossing Program - Using data obtained from implementation of Paragraph 2a., Accurate Identification of Accident Locations, each State, and especially its political subdivisions, should identify high hazard pedestrian crossings. These crossings should be identified and a systematic plan for improvement established by December 31, 1975.

3. PROGRAM APPRAISAL

The annual work program (described in HSPM Vol. 103) and the comprehensive plan (described in HSPM Vol. 102) should reflect this program. Any State which does not include these activities in its comprehensive plan and/or annual work program will be expected to justify the omission on the basis of its special safety needs.

APPENDIX C

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Midland, Tex.—Midland Regional Air Terminal, VOR Rwy 34L, Amdt. 8.
N. Myrtle Beach, S.C.—Myrtle Beach Arpt., VOR Rwy 3, Amdt. 10.
N. Myrtle Beach, S.C.—Myrtle Beach Arpt., VOR Rwy 33, Amdt. 11.
Orlando, Fla.—McCoy AFB, VOR Rwy 18L and 18R, Amdt. 2.

§ 97.25 [Amended]

2. Section 97.25 is amended by originating, amending, or canceling the following SDF-LOC-LDA SIAPs, effective July 11, 1974:

Beaumont/Port Arthur, Tex.—Jefferson County Arpt., LOC (BC) Rwy 29, Amdt. 9.
Bismarck, N.D.—Bismarck Municipal Arpt., LOC/DME (BC) Rwy 13, Amdt. 1.
Cleveland, Ohio—Cleveland Hopkins Int'l. Arpt., LOC (BC) Rwy 31, Amdt. 2.
McComb, Miss.—McComb-Pike County Arpt., LOC (BC) Rwy 33, Amdt. 1.
McComb, Miss.—McComb-Pike County Arpt., LOC Rwy 15, Orig.
Midland, Tex.—Midland Regional Air Terminal, LOC (BC) Rwy 28, Amdt. 9.
North Myrtle Beach, S.C.—Myrtle Beach Arpt., LOC Rwy 23, Amdt. 2.
Orlando, Fla.—Herdson Arpt., LOC (BC) Rwy 35, Amdt. 9.

* * * effective June 27, 1974:

Chicago, Ill.—Chicago O'Hare Int'l. Arpt., LOC Rwy 4L, Amdt. 8.

* * * effective June 20, 1974:

Scottsbluff, Neb.—Scotts Bluff County Arpt., LOC (BC) Rwy 13, Orig.

* * * effective June 13, 1974:

Chicago (West Chicago), Ill.—DuPage County Arpt., LOC Rwy 10, Orig.

§ 97.27 [Amended]

3. Section 97.27 is amended by originating, amending, or canceling the following NDB/ADF SIAPs, effective July 11, 1974:

Beaumont/Port Arthur, Tex.—Jefferson County Arpt., NDB Rwy 11, Amdt. 8.
Bismarck, N.D.—Bismarck Municipal Arpt., NDB Rwy 31, Amdt. 23.
Cleveland, Ohio—Cleveland Hopkins Int'l. Arpt., NDB Rwy 31L, Amdt. 8.
Cleveland, Ohio—Cleveland Hopkins Int'l. Arpt., NDB Rwy 23L, R, Amdt. 1.
Cleveland, Tenn.—Hardwick Field, NDB Rwy 3, Orig.
Oueden, Ala.—Oueden Municipal Arpt., NDB Rwy 6, Amdt. 7.
Mandaball, Kans.—Mandaball Municipal Arpt., NDB A, Amdt. 10.
Midland, Tex.—Midland Regional Air Terminal, NDB Rwy 10, Amdt. 6.
N. Myrtle Beach, S.C.—Myrtle Beach Arpt., NDB Rwy 23, Amdt. 2.
Orlando, Fla.—Herdson Arpt., NDB Rwy 7, Amdt. 7.

* * * effective June 27, 1974:

Sturgeon, Mo.—Sturgeon Memorial Municipal Arpt., NDB Rwy 30, Amdt. 1.

* * * effective June 20, 1974:

Cor. Minn.—Cor. Public Arpt., NDB Rwy 13, Orig.
Scottsbluff, Neb.—Scotts Bluff County Arpt., NDB Rwy 13, Orig.

§ 97.29 [Amended]

4. Section 97.29 is amended by originating, amending, or canceling the following ILB SIAPs, effective July 11, 1974:

Albuquerque, N.M.—Albuquerque Int'l. Arpt., ILB Rwy 35, Amdt. 31.
Beaumont/Port Arthur, Tex.—Jefferson County Arpt., ILB Rwy 11, Amdt. 10.
Bismarck, N.D.—Bismarck Municipal Arpt., ILB Rwy 31, Amdt. 24.
Cleveland, Ohio—Cleveland Hopkins Int'l. Arpt., ILB Rwy 31L, Amdt. 12 canceled.
Cleveland, Ohio—Cleveland Hopkins Int'l. Arpt., ILB Rwy 23L, Amdt. 2.
Midland, Tex.—Midland Regional Air Terminal, ILB Rwy 10, Amdt. 9.
Orlando, Fla.—Herdson Arpt., ILB Rwy 7, Amdt. 10.

* * * effective June 13, 1974:

Philadelphia, Pa.—Philadelphia Int'l. Arpt., ILB Rwy 27L, Orig.

§ 97.31 [Amended]

5. Section 97.31 is amended by originating, amending, or canceling the following RADAR SIAPs, effective July 11, 1974:

Macon, Ga.—Lewis B. Wilson Arpt., RADAR, Amdt. 11.

Correction. In Docket No. 13709, Amdt. 917, to Part 97 of the Federal Aviation Regulations, published in the Federal Register under §§ 97.23, 97.29 and 97.33 effective July 4, 1974—Change effective date of Los Angeles, Calif.—Los Angeles Int'l. Arpt., VOR Rwy 25L, Amdt. 6; VOR Rwy 25R, Amdt. 6; ILB Rwy 24L/R, Amdt. 5; ILB Rwy 20L/R, Amdt. 7; RNAV Rwy 24R, Amdt. 2; RNAV Rwy 25L, Amdt. 3 to August 15, 1974.

(See 307, 313, 601, 1110, Federal Aviation Act of 1946; (46 U.S.C. 1436, 1354, 1421, 1510); sec. 8(c), Department of Transportation Act, (46 U.S.C. 1556(c); 5 U.S.C. 469(a)(1)).

Note: Incorporation by reference provisions in §§ 97.10 and 97.30 approved by the Director of the Federal Register on May 12, 1969. (35 FR 5610).

Issued in Washington, D.C., on May 23, 1974.

JAMES M. VINEY,

Chief,

Aircraft Programs Division.

[FR Doc. 74-12437 Filed 5-30-74; 9:45 am]

Title 21—Food and Drugs

CHAPTER I—FOOD AND DRUG ADMINISTRATION, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

SUBCHAPTER C—DRUGS

PART 135c—NEW ANIMAL DRUGS IN ORAL DOSAGE FORMS

Dexamethasone Bolus, Veterinary

The Commissioner of Food and Drugs has evaluated a supplemental new animal drug application (30-435V) filed by Schering Corp. proposing revised labeling for safe and effective use of dexamethasone bolus, veterinary as supportive therapy for management of inflammatory conditions in cattle and horses. The supplemental application is approved.

Therefore, pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (sec. 512(i), 82 Stat. 347, 21 U.S.C. 360b(i)) and under authority delegated to the Commissioner (21 CFR 3.125),

Part 135c is amended by adding a new section as follows:

§ 135c.81 Dexamethasone bolus, veterinary.

(a) Specifications. Dexamethasone bolus, veterinary contains 10 milligrams of dexamethasone in each bolus which is half-scored.

(b) Sponsor. See code No. 032 in § 135c.501(c) of this chapter.

(c) Conditions of use. (1) Dexamethasone bolus, veterinary is indicated in cases where cattle and horses require additional steroid therapy following its parenteral administration. The drug may be used as supportive therapy for management of inflammatory conditions such as acute arthritic lamenesses, and for various stress conditions where corticosteroids are required while the animal is being treated for a specific condition.

(2) The drug is administered orally at a dosage level of 5 to 10 milligrams per animal the first day, then 5 milligrams per day as required.

(3) Clinical and experimental data have demonstrated that corticosteroids administered orally or by injection to animals may induce the first stage of parturition when administered during the last trimester of pregnancy and may precipitate premature parturition followed by dystocia, fetal death, retained placenta, and metritis.

(4) Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Effective date. This order shall be effective May 31, 1974.

(See 512(i), 82 Stat. 347; 21 U.S.C. 360b(i)).

Dated: May 22, 1974.

C. D. VAN HOUTWELING,
Director, Bureau of
Veterinary Medicine.

[FR Doc. 74-12405 Filed 5-30-74; 9:45 am]

Title 23—Highways

CHAPTER II—HIGHWAY SAFETY PROGRAM STANDARDS, DEPARTMENT OF TRANSPORTATION

PART 1206—RULES OF PROCEDURE FOR INVOKING SANCTIONS UNDER THE HIGHWAY SAFETY ACT OF 1966

This notice amends Title 23, Code of Federal Regulations, by adding a Part 1206 that specifies rules of procedure for invoking the sanctions of the Highway Safety Act of 1966 against States that fail to satisfy their statutory obligations to implement an approved highway safety program in accordance with the Act and the standards (23 CFR 1204.4) issued thereunder.

The procedures provide for the invocation of not only section 402(c) appropriation sanctions, but also two additional section 402 sanctions. One, derived pursuant to section 402(d) from 23 U.S.C. 116, provides for withholding approval of further highway safety programs. The other, modeled after the Federal-aid highway fund sanction in 23 CFR 136, provides for withholding of funds for the reimbursement of State expenditures.

Section 402 does not require that a formal 23 U.S.C. 556-557 hearing be held prior to invoking the sanctions. To ensure an expeditious and fair determination of whether the sanctions should be invoked, the procedures provide for an informal, legislative-type hearing similar to that provided by 5 U.S.C. 553.

Under the procedures, whenever the Administrators of the Federal Highway Administration and National Highway Traffic Safety Administration find a situation warranting initiation of sanction proceedings, they jointly issue a proposed recommended determination to invoke the sanctions.

The Administrators then send a letter to the Governor of the affected State, and publish a notice in the *FEDERAL REGISTER*, setting forth the proposed recommended determination, including the program deficiencies upon which the determination was based, and announcing a public hearing for the presentation of evidence and views by the affected State and interested persons concerning the deficiencies.

A three member board conducts the hearing. The Administrators each select an official from their respective Administrations to serve on the board. The third member is an official of the Office of the Secretary of Transportation (OST) designated by the Secretary. The OST member serves as the presiding officer. The board's primary task is to ensure that the hearing proceeds in an orderly and expeditious manner and that the presentations by the affected State and interested persons are as complete and clear as possible.

At any time prior to the commencement of the hearing, the affected State and the Administrators can agree, subject to the Secretary's approval, to settle the matters which constitute the basis of the proposed recommended determination. If the Secretary ratifies the proposed settlement, he publishes a notice in the *FEDERAL REGISTER* setting forth the terms of the settlement.

If there is no settlement or if the Secretary declines to ratify the proposed settlement, the sanction proceedings continue and a hearing is held. To simplify the issues and otherwise facilitate the hearing, the presiding officer can, on his own initiative or on written request by the Governor of the affected State, hold a public prehearing conference. The results of such conference are memorialized in a notice issued by the presiding officer and published in the *FEDERAL REGISTER*.

On the basis of the Administrators' review of the hearing transcript, exhibits and other documents filed at the hearing, prehearing conference notices, and the evidence of the Administrations regarding the affected State's program deficiencies, they make a recommended determination.

The recommended determination and materials reviewed by the Administrators are forwarded to the Secretary.

The Secretary makes the final determination whether to invoke the sanctions after reviewing the recommended deter-

mination and material forwarded by the Administrators. He can adopt the recommended determination or reject it in whole or in part. His final determination is furnished each hearing participant and published in the *FEDERAL REGISTER*.

A State that is determined to be either lacking an approved highway safety program or not implementing an approved program, would be subject to several sanctions. The first sanction would be the withholding, pursuant to section 402(c), of all of the State's section 402 Federal highway safety funds from the next apportionment and each subsequent apportionment until the Secretary was satisfied that the State's deficiencies had been corrected. Of course, if the State corrected its deficiencies prior to the next apportionment, the State would avoid the permanent loss of any funds. The second sanction would be the withholding, pursuant to section 402(c), of 10 percent of the State's section 104 Federal-aid highway funds from the apportionment for the same fiscal year, unless the Secretary found it to be in the public interest to suspend the application of this sanction to the State.

The third sanction would be the withholding, pursuant to section 402, of approval of any of the State's further highway safety program. Effective on the date that the State ceased to have an approved program, the State's further highway safety expenditures would not be reimbursable with section 402 Federal highway safety funds.

This sanction is derived from 23 U.S.C. 116 which imposes upon a State the duty to "maintain" its Federally-assisted highway construction projects. The section provides for the withholding of approval for any further projects in a State if the State fails to "maintain" any existing project. By virtue of section 402(d) section 116 applies to the State highway safety programs conducted pursuant to section 402. In adapting section 116 to the highway safety context of section 402, we interpret the term "maintain" as meaning "implement."

In addition to being subject to these three sanctions, the State would also be subject to the withholding of Federal funds available for reimbursing the State with respect to obligations it incurs after the Secretary's determination or a subsequent date established in his determination. This sanction is established under 23 U.S.C. 315 which provides authority for issuing rules and regulations necessary for implementing title 23. The similar Federal-aid highway fund sanction in 23 CFR 1.36 was also established under section 315.

The sanctions differ from each other in several important respects. While the reimbursement sanction can be implemented at any time of year, the apportionment sanction can be implemented only toward the end of a calendar year when funds are apportioned under 23 U.S.C. 104 and 402. The approval sanction can be implemented only toward the end of a fiscal year when the annual work programs are approved for the next

year. Further, the approval and reimbursement sanctions are less severe than the apportionment sanctions in that the former sanctions result only in a State's temporary loss of funds. Once the State resumes implementation, it can recover the withheld funds. Conversely, invocation of the apportionment sanctions prevents certain funds from ever being apportioned to the affected State. The funds would be permanently lost to the State since section 402(c) requires that funds withheld from apportionment to a State be apportioned to the other States.

The regulation established by this notice is a rule of agency organization, procedure, and practice within the meaning of 5 U.S.C. 553(b) (B), and therefore requires no notice of proposed rulemaking in order to become effective.

Effective date. In view of the short time remaining before the end of the current fiscal year and the need to clarify the status of the highway safety programs in several states as quickly as possible, an immediate effective date is found to be in the public interest. The regulation is therefore issued to be effective May 31, 1974.

Issued on May 28, 1974.

NORBERT T. TYMANN,
Administrator,
Federal Highway Administration,
JAMES B. GREGORY,
Administrator, National Highway
Traffic Safety Administration.

Sec.	Scope.
1206.1	Purpose.
1206.2	Definitions.
1206.3	Sanctions.
1206.4	Contents of proceedings.
1206.5	Contents of notice of proposed recommended determination.
1206.6	Hearing officers.
1206.7	Prehearing conference.
1206.8	Consent determination.
1206.9	Hearing.
1206.10	Recommended determination.
1206.11	Final determination.
1206.12	Authority: (23 U.S.C. 116, 315, 402).

§ 1206.1 Scope.

This part establishes procedures governing determinations to invoke the sanctions applicable to any State that does not comply with the highway safety program requirements in the Highway Safety Act of 1966, as amended (23 U.S.C. 402), and highway safety program standards issued thereunder.

§ 1206.2 Purpose.

The purpose of this part is to prescribe procedures for determining whether and the extent to which the 23 U.S.C. 402 sanctions should be invoked, and to ensure a full airing of views on the issues relevant to such determinations by affording the affected State and all other interested persons an opportunity to participate in a public hearing.

§ 1206.3 Definitions.

As used in this part:

(a) "Administrators" means the Administrators of the Federal Highway Ad-

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ministration and the National Highway Traffic Safety Administration.

(b) "Affected State" means the State with respect to which a proposed recommended determination has been made pursuant to this part.

(c) "Highway safety program" means a State program consisting of both (1) a Comprehensive Highway Safety Plan, a multi-year plan of the State and its political subdivisions for implementing the highway safety program standards and (2) an Annual Highway Safety Work Program, a program detailing the activities and proposed expenditures of the State and its political subdivisions for implementing selected components of the State's Comprehensive Highway Safety Plan during a single year.

(d) "Highway safety program standards" means the standards in § 1204.4 of this chapter, issued under 23 U.S.C. 402, for State highway safety programs.

(e) "Implementing" includes, but is not limited to, complying with conditions upon which the Secretary has granted approval for a State's highway safety program.

(f) "Secretary" means the Secretary of Transportation.

§ 1206.4 Sanctions.

(a)(1) Except as provided in paragraph (a)(2) of this section, the Secretary withholds all of a State's Federal highway safety funds and 10 percent of its Federal-aid highway funds that would otherwise have been apportioned to the State under 23 U.S.C. 402 and 104, respectively, and withholds approval of further highway safety programs in the State, if he finally determines pursuant to this part that a State—

(A) Does not have a highway safety program approved by him in accordance with 23 U.S.C. 402; or

(B) Is not implementing such an approved program.

(2) The Secretary may suspend, for such periods as he deems necessary, the application to a State of the provision in 23 U.S.C. 402 regarding the withholding of funds apportioned under 23 U.S.C. 104, if he determines that such suspension is in the public interest.

(3) When the Secretary withholds funds and program approval from a State pursuant to paragraph (a)(1) of this section, he continues doing so until the State has an approved program or is implementing an approved program to his satisfaction, as appropriate.

(b)(1) The Governor of each State shall implement, or cause to be implemented, a highway safety program approved by the Secretary pursuant to 23 U.S.C. 402. If the Governor lacks legal authority to implement such program or part thereof, he shall enter into formal agreements for its implementation with appropriate officials of the appropriate State agency, political subdivision, or other governmental instrumentality. However, the existence of such agreement does not relieve the Governor of his responsibility for implementation of the entire highway safety program.

(2) If the Secretary finally determines pursuant to this part that a State has

failed to comply with the Federal laws or regulations with respect to its highway safety program, or has failed to implement a highway safety program approved by him pursuant to 23 U.S.C. 402, he may withhold payment to the State on account of (i) the State's current annual highway safety work program, with respect to obligations incurred after the date of the Secretary's determination or a date established in such determination, whichever is later, and (ii) the State's subsequent annual highway safety work programs, and may also withhold approval of further highway safety programs of the State, until the State complies or takes remedial action to the satisfaction of the Secretary, as appropriate.

§ 1206.5 Commencement of proceedings.

(a) The Administrators initiate the proceedings pursuant to this part by making a proposed recommended determination to invoke the sanctions specified in § 1206.4.

(b) The Administrators send the Governor of the affected State by certified mail and publish in the *FEDERAL REGISTER* a notice of the proposed recommended determination.

§ 1206.6 Contents of notice of proposed recommended determination.

The notice of proposed recommended determination includes—

(a) A statement of the reasons for the proposed action, including the specific highway safety program deficiencies upon which the proposed recommended determination is based; and

(b) The time, date, and place for a hearing at which the affected State and any interested person may present evidence and oral and written views, or both, concerning the specified deficiencies. Hearings are held in Washington, D.C., at the headquarters of the Department of Transportation.

§ 1206.7 Hearing officers.

(a) A three-member hearing board is established consisting of an Office of the Secretary official appointed by the Secretary, a Federal Highway Administration official appointed by the Administrator of that Administration, and a National Highway Traffic Safety Administration official appointed by the Administrator of that Administration. The official from the Office of the Secretary serves as presiding officer. The appointment of the hearing board is announced in a notice published in the *FEDERAL REGISTER* by the presiding officer. A copy of the notice is sent to the Governor of the affected State by certified mail.

(b) The presiding officer has power to take any action and to make all necessary rules and regulation, to govern the conduct of the hearing. His powers include the following:

(1) Changing the date and time of the hearing upon reasonable notice to the affected State and other hearing participants; and publication of such change in the *FEDERAL REGISTER*;

(2) Continuing the hearing in whole or in part;

(3) Regulating the course of the hearing and the conduct of the participants and counsel therein;

(4) Examining witnesses; and

(5) Taking any other action authorized by this part.

§ 1206.8 Prehearing conference.

(a) At any time before the hearing begins, the presiding officer, on his own initiative or at the written request of the Governor of the affected State, may, after publication of a notice in the *FEDERAL REGISTER* giving notice to interested persons, convene a public prehearing conference to consider the following:

(1) Simplification and clarification of the issues;

(2) Stipulations as to the facts, and contents and authenticity of documents;

(3) Disclosure of the names and addresses of witnesses and provision of documents intended to be offered in evidence; or

(4) Any other matter that will tend to simplify the issues or expedite the proceedings.

§ 1206.9 Consent determination.

At any time prior to the commencement of the hearing, the affected State and the Administrators may execute an appropriate agreement for disposing of the matter, on which the proposed recommended determination is based, by mutual consent for the consideration of the Secretary. The agreement is submitted to the Secretary, who may—

(a) Accept it and publish a notice in the *FEDERAL REGISTER* setting forth its terms;

(b) Reject it and direct that the proceedings in the matter continue; or

(c) Take such other action as he deems appropriate.

§ 1206.10 Hearing.

(a) Hearings held pursuant to this part are informal, legislative-type hearings and are open to the public.

(b) The affected State and any interested person participating in a hearing conducted pursuant to this part may, except as specified by the presiding officer pursuant to § 1206.7(b)—

(1) Appear by counsel or other authorized representative;

(2) Present evidence orally or by documents; and

(3) Present oral or written argument.

(c) The hearing is stenographically transcribed verbatim and reported by an official reporter designated by the presiding officer.

(d) As soon as practicable after the presiding officer receives the official transcript of the hearing, exhibits, and other documents filed at the hearing, he forwards them to the Administrators.

§ 1206.11 Recommended determination.

As soon as practicable, the Administrators review the materials forwarded to them by the presiding officer, any prehearing conference notices, and the evidence of the Administrations regarding the affected State's program deficiencies in the proposed recommended determination. On the basis of the review, they issue a recommended determination:

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and submit it and the material they reviewed to the Secretary.

§ 1206.12 Final determination.

(a) As soon as practicable, the Secretary reviews the recommended determination and the material forwarded him by the Administrator. On the basis of the review, the Secretary may adopt or reject the recommended determination, in whole or in part. The Secretary then issues a final determination which includes:

(1) His decision, and reasons therefor, on the question of whether and to what extent the sanctions provided in § 1206.4 will be invoked; and

(2) A specification of the funds and program approval, if any, to be withheld.

(b) A copy of the final determination is sent by certified mail to the Governor of the affected State and to each other hearing participant, and is published in the FEDERAL REGISTER.

[FR Doc 74-19492 Filed 5-30-74; 12:51 pm]

Title 36—Parks, Forests and Public Property

CHAPTER 1—NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR

PART 6—MISCELLANEOUS FEES

Visitor Use and Entrance Charges

Notice is hereby given that the provision formerly designated as § 6.7(e), Wrongful entry, which was inadvertently revoked and withdrawn by notice in the FEDERAL REGISTER of April 30, 1973 (38 FR 10639) is hereby reinstated with minor clarifying language changes effective January 1, 1975, and designated as § 6.5 Visitor use and entrance charges.

When it became necessary to revoke the recreation fee regulations published in the FEDERAL REGISTER on February 15, 1973 (37 FR 3350) and the revision thereof because of re-establishment of the Golden Eagle fee program by Act of Congress (Act of July 11, 1972, 86 Stat. 459), the prohibition against wrongful entry of park areas, etc., should have been retained and in fact it was considered as being in effect. The omission was discovered within the last few weeks.

For reasons stated, it has been determined that notice and public procedure thereon are not necessary and re-instatement of the following section shall become effective May 31, 1974.

Part 6, of 36 CFR Chapter I is hereby amended and corrected to include the following provision:

§ 6.5 Visitor use and entrance charges.

Wrongful entry and use. No person shall enter designated entrance fee areas or use specialized sites, facilities, equipment or services or participate in group activities recreation events or other specialized recreation uses for which recreation fees have been established without paying the required fees and possessing the applicable permits.

RUSSELL E. DICKINSON,

Acting Director,

National Park Service.

[FR Doc 74-19444 Filed 5-30-74; 9:45 am]

Title 40—Protection of Environment

CHAPTER 1—ENVIRONMENTAL PROTECTION AGENCY

SUBCHAPTER E—PESTICIDE PROGRAMS

PART 180—TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES

Leptophos

A petition (PP 2F1228) was filed by Velacel Chemical Corp., 341 East Ohio Street, Chicago, IL 60611 (formerly at 1725 K Street, NW., Washington, DC 20006), in accordance with provisions of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 346a), proposing establishment of tolerances for combined residues of the insecticide leptophos (O-(4-bromo-2,5-dichlorophenyl) O-methyl phenylphosphonothioate) and its metabolites O-(4-bromo-2,5-dichlorophenyl) O-methyl phenylphosphonate, 4-bromo-2,5-dichlorophenol, and O-(2,5-dichlorophenyl) O-methyl phenylphosphonothioate in or on the raw agricultural commodities broccoli, brussels sprouts, cabbage, and lettuce at 5 parts per million; tomatoes at 2 parts per million; cottonseed at 0.3 part per million; fat, meat, and meat byproducts of cattle at 0.25 part per million; potatoes at 0.15 part per million; milk at 0.1 part per million; fresh corn including sweet corn (kernels plus cob with husk removed) at 0.05 part per million; and eggs and fat, meat, and meat byproducts of poultry at 0.04 part per million.

Subsequently, the petitioner amended the petition by (a) withdrawing the proposed tolerances for residues in or on broccoli, brussels sprouts, cabbage, cottonseed, potatoes and fresh corn including sweet corn (kernels plus cob with husk removed) and in eggs, milk, and the fat, meat, and meat byproducts of cattle and poultry, (b) increasing the proposed tolerance on lettuce from 5 parts per million to 10 parts per million, and (c) proposing that all residues be calculated as leptophos.

Based on consideration given the data submitted in the petition and other relevant material, it is concluded that:

1. The insecticide is useful for the purpose for which the tolerances are being established.
2. There is no reasonable expectation of residues in eggs, meat, milk, or poultry and § 180.6(a)(3) applies.
3. The tolerances established by this order will protect the public health.
4. Leptophos and its cholinesterase-inhibiting metabolites should be added to the list of cholinesterase-inhibiting pesticides in § 180.3(e)(5).

Therefore, pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (see 408(d)(2), 68 Stat. 512; 21 U.S.C. 346a(d)(2)) the authority transferred to the Administrator of the Environmental Protection Agency (35 FR 15623), and the authority delegated by the Administrator to the Deputy Assistant Administrator for Pesticide Programs (36 FR 9638), Part 180 is amended as follows:

1. Section 180.3(e)(5) is amended by alphabetically inserting in the list of cholinesterase-inhibiting pesticides a new item as follows:

§ 180.3 Tolerances for related pesticide chemicals.

(e) * * *

(5) * * *

Leptophos and its cholinesterase-inhibiting metabolites. * * *

2. The following new § 180.345 is added to Subpart C:

§ 180.345 Leptophos; tolerances for residues.

Tolerances are established for combined residues of the insecticide leptophos (O-(4-bromo-2,5-dichlorophenyl) O-methyl phenylphosphonothioate) and its metabolites O-(4-bromo-2,5-dichlorophenyl) O-methyl phenylphosphonate, 4-bromo-2,5-dichlorophenol, and O-(2,5-dichlorophenyl) O-methyl phenylphosphonothioate (calculated as leptophos) as follows:

10 parts per million in or on lettuce.

2 parts per million in or on tomatoes.

Any person who will be adversely affected by the foregoing order may at any time on or before July 1, 1974 file with the Hearing Clerk, Environmental Protection Agency, Room 1015E, 4th & M Streets, SW., Waterside Mall, Washington, D.C. 20460, written objections thereto in triplicate. Objections shall show wherein the person filing will be adversely affected by the order and specify with particularity the provisions of the order deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought. Objections may be accompanied by a memorandum or brief in support thereof.

Effective date. This order shall become effective May 31, 1974.

(See 408(d)(2), 68 Stat. 512; 21 U.S.C. 346a(d)(2).)

Dated: May 28, 1974.

HENRY J. KOSF,

Deputy Assistant Administrator

for Pesticide Programs.

[FR Doc 74-12557 Filed 5-30-74; 8:45 am]

Title 41—Public Contracts and Property Management

CHAPTER 101—FEDERAL PROPERTY MANAGEMENT REGULATIONS

SUBCHAPTER E—SUPPLY AND PROCUREMENT

[FPMR Amdt. E-141]

PART 101-32—GOVERNMENT-WIDE AUTOMATED DATA MANAGEMENT SERVICES

Future System Plans

Subpart 101-32.15 is added to provide that agencies shall submit to GSA annually their future plans for major automated data and telecommunications sys-

APPENDIX D

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIAPUBLIC CITIZEN, et al.,

Plaintiffs,

v.

CLAUDE S. BRINEGAR, Secretary,
Department of Transportation,

Defendant.

Civil Action

No. 74-1621

F I L E D

MAR 20 1975

James F. Davey, Clerk

ORDER GRANTING SUMMARY JUDGMENT FOR DEFENDANT

Upon consideration of defendant's motion to dismiss or for summary judgment, the memorandum of points and authorities in support thereof, plaintiffs' memorandum of points and authorities in opposition thereto, plaintiffs' motion for summary judgment, defendant's objections and response to plaintiffs' statement of material facts, the affidavits and exhibits filed herein, the entire file herein, and oral argument having been heard by the Court, and it appearing to the Court that plaintiffs herein have sufficient standing to sue, and it further appearing that plaintiffs allege that defendant, pursuant to his statutory duty as set forth in the Highway Safety Act of 1966, as amended, 23 U.S.C. §§ 401-406 (the "Act"), has no discretion to grant conditional safety program approvals nor to temporarily continue program funds while seeking compliance with uniform safety standards or the implementation of approved safety programs, and it further appearing that plaintiffs

allege that defendant has no discretion to withhold the imposition of sanctions provided by the Act when a State has not fully complied with the uniform safety standards or is not fully implementing approved safety programs, and it further appearing that plaintiffs have alleged in their complaint specific instances where the defendant has failed to withhold program approval, or impose statutory sanctions, or make specific findings that it is in the public interest not to impose certain sanctions, see 23 U.S.C. § 402 (c), and that defendant, by so doing, has acted in excess of his statutory authority and not in accordance with law; and it appearing to the Court that the Act directs defendant to assist and cooperate with the States in order to increase highway safety, see, e.g., 23 U.S.C. § 401, 402 (e), and, accordingly, that the Act vests defendant with the discretion to determine when a State has failed to make reasonable progress in complying with the uniform safety standards or implementing approved safety programs, see, e.g., H.R. Rep. No. 1799, 90th Cong., 2d Sess., at 29, and that such discretion includes the power to grant conditional program approvals and to temporarily continue funds while seeking full compliance with the uniform safety standards and the full implementation of approved programs, and that imposition of statutory sanctions becomes non-discretionary only after defendant has made a determination that a State is not making reasonable progress in complying with the uniform safety standards or implementing approved programs, and it further appearing to the Court that in the specific instances alleged in the complaint that the defendant has not acted in excess of his statutory authority, nor has he acted arbitrarily, capriciously, nor abused his discretion, and that defendant has acted otherwise in

accordance with law, and it appearing that there exists no genuine issue of material fact and that defendant is entitled to judgment as a matter of law, it is by the Court this 26th day of March, 1975,

ORDERED, that plaintiffs' motion for summary judgment be, and the same hereby is denied; it is further

ORDERED, that defendant's motion to dismiss be, and the same hereby is, denied; it is further

ORDERED, that defendant's motion for summary judgment be, and the same hereby is, granted.

/s/ Joseph C. Waddy
United States District Judge

NOTE: This Order Granting Summary Judgment for
Defendant copied verbatim.

Senator STAFFORD. We will conclude the testimony in this forum by asking Mr. Richard Peet, who is the president of the Citizens for Highway Safety, if he would care to proceed.

STATEMENT OF RICHARD C. PEET, PRESIDENT, CITIZENS FOR HIGHWAY SAFETY

Mr. PEET. Thank you, Mr. Chairman. My name is Richard Peet. I am president of a relatively new organization called Citizens for Highway Safety. Our primary mission is to secure top priority, full funding, and effective implementation of all of the lifesaving provisions of the Highway Safety Act of 1973, which I, as a counsel of the Public Works and Transportation Committee of the other body, had the privilege of working on during the formative stages.

A good place to begin my remarks would be August 1973, when Congress passed, and the President signed into law, the Highway Safety Act of 1973. For the previous 3 years, I had the good fortune to work closely with Congressman Bill Harsha, a principal author of the act in the other body.

The 1973 act was landmark legislation. Its approach was different from anything that had preceded it. Its novelty was based upon several factors. In concept, what it did was divide into manageable segments those identifiable aspects of highway safety which, if properly addressed, promised to yield significant dividends in reductions of accidents, injuries and fatalities.

For each such problem area, it mandated a plan of action allocated the funds to carry it forward and, for the first time, required "before" and "after" evaluation of whatever was done. The act embodied significant breaks with the past:

1. For the first time, a new category of project was identified for Federal assistance—something less than that defined as "construction" but more than what was traditionally regarded as "maintenance"—a safety construction improvement project. The objective was to focus in on a class of highway conditions which had become known as "killer boobytraps." The objective was to provide the means and methodology to systematically identify and correct them.

2. For the first time, Highway Trust Fund moneys were allocated to finance a major share of the cost of safety improvement programs. Since 1966 and before, effecting safety improvements had been an objective of the Federal-aid highway program. But separate moneys had never been provided for this purpose. Let's face it, mandates without money seldom produce results, even when they emanate from the Congress of the United States.

3. For the first time, a balance of authorizations was struck between highway construction and highway safety programs aimed at ending the latter's traditional stepchild status in the competition for funding. Under the new law, the total authorizations for both construction and safety programs roughly totaled estimated revenues likely to be generated each year by the Highway Trust Fund.

4. For the first time—and I think, Senator Stafford, you were responsible for this—a demonstration program was authorized for safety improvements with highway trust fund moneys on roads off the Federal-aid system. The quarter of a billion dollars provided for

this purpose represented an ambitious step for our national safety program.

5. Last, but certainly not least, for the first time, Congress established a two-pronged incentive program—to encourage the States to adopt safety belt use laws and to reward those States which achieved the most significant death-rate reductions each year. The overall aim of this provision was to test out a whole new approach to promoting highway safety. I will comment further on the incentive program later in this testimony.

In theory, after a bill is signed into law, legislators can confidentially sit back and await results of implementation. If they are good, the program will likely be continued. If they are not, changes will be made or it will be scrapped.

But performance of a congressional program can only be fairly judged if it is given the priority, funding and implementation needed to realize its potential. In the case of the Highway Safety Act of 1973, that potential was very great. Estimates indicate that, at a minimum, 10,000 lives can be saved and 100,000 serious injuries can be prevented each year if its provisions are carried out as intended. In addition, reductions of billions of dollars in people and property damage can be achieved.

Unfortunately, almost before the ink was dry on the 1973 Safety Act, a series of decisions were made whose effect was, in some cases, to undermine and, in others, to redirect the basic policies and programs contained in the act.

Some of these unfortunate decisions, such as the trust fund impoundments ordered by the Office of Management and Budget, were allegedly made for anti-inflationary reasons. Others, I am sorry to say, resulted either from an insufficient grasp of, or unwillingness to adhere to, clearly stated or intended congressional purposes.

Let's look at the record. From the outset of the program, I was much impressed with the commitment of the Federal Highway Administration—I disagree with my friend from the Center for Auto Safety on this. Both by word and action, it was my observation that their top people demonstrated that they were doing what they could, within the limitations imposed on them, to carry out the programs.

They were stymied, however, by the fact that the impoundment of needed funds was forcing State highway departments to choose between highway construction and highway safety. As had happened in the past, the latter came out second best. Although an evolutionary process was going on which was gradually changing people's minds on this score, some State highway officials still believe that the best form of safety is building another mile of highway.

Some obligations were, of course, made. But I am sad to say, by February of 1975, a year and a half into the program, only \$125 million of the roughly billion dollars available under the 3-year program has been obligated.

Then, in that month, a dramatic thing happened. In order to stimulate the sagging construction industry and economy, President Ford, who incidentally supported this legislation when he was minority leader of the other House, released \$2 billion in formerly impounded funds, directing that priority be given for highway safety projects.

In 4 short months, a near miracle occurred. Over \$300 million was obligated for the heretofore lagging title II safety improvements program. While it is too early to assess results—most of the projects approved have yet to be carried out—momentum is obviously being gained which, if sustained, will mean that all the funds authorized under the 1973 act will ultimately be spent.

The chart that Mrs. Nash is holding illustrates the kind of progress being made in recent months. The area in blue, gentlemen, is the total authorizations and the period of availability of the 1973 act authorizations. The yellow line which proceeds through the chart illustrates the amounts either allocated or apportioned to the States for the programs.

The green line that you see beginning early on in the chart and moving upward shows the dramatic progress, slow for the first 18 months of the program and then skyrocketing following release of impounded moneys last February.

For those interested in making our highways more "forgiving," that is very good news. And this committee can claim a large share of the credit for making this possible. Your refusal to go along with the administration's "deferral" request submitted earlier this year assured the availability of sufficient funds to carry the programs forward. This happened when the competition between highway construction and highway safety funds was eliminated.

Where do we go from here? There are those, including individuals I have great respect for in the Federal Highway Administration, the American Roadbuilders Association, AASHTO and elsewhere, who believe the time has come to consolidate the multiplicity of categorical grants which have come into existence through the years. In so far as for safety is concerned, they would put all the programs established in the 1973 act into a single safety category. I disagree.

There are others who believe that the highway trust fund should be dismantled, or its funds should be restricted, as in the case of the administration's proposal, to funding Interstate construction. The effect of this would be to undo one of the most significant breakthroughs of the 1973 act, allocation of highway trust fund moneys for systematic correction of killer boobytraps on the Nation's highways. To this, I also disagree.

Personally, I view the 1973 act as a giant demonstration program. Its purpose is to test out new concepts and approaches to determine which ones work and which ones do not; which are cost-effective and which are not; which should be continued and which should not.

I am not at all against the consolidation of the safety improvement categorical grant programs into a single category at some future date. But is this the time? Would consolidation now prove to be a step forward or a step backward for the highway safety program.

Before the act was passed, systematic safety improvements on our highways were not being made. Moreover, there was a woeful lack of data on whether they were worth making on a cost-benefit basis. Thus, during the formative stages of this legislation, from a practical standpoint, we could only make intuitive guesses as to what the parameters of a good safety program should be.

That is the reason the categorical approach was used in the 1973 act. Its aim was to assure that no type of safety improvement would be neglected and that all types would be carried out in all jurisdictions

to a point where, by the conclusion of the three-year program, fiscal 1974 through 1976, we would know enough about payoffs to set future priorities.

Under the 1973 act, instead of safety improvements being more or less limited to those incorporated in the relatively few thousand miles of new road construction work undertaken each year, the entire road system of the United States became eligible for targeted safety improvements—limited in size and scope and minimizing red tape in all its forms.

As earlier mentioned, we have just, in the past few months, reached the point where sufficient obligations under the program are being made to produce measurably significant results. But we will not really be able to assess them for another year or two. Had the act gotten off to a quicker start, had impoundments not unduly delayed implementation, such "after" evaluation data would already be in the pipeline. Unhappily, this is not the case.

Now, however, we are moving rapidly ahead. Results will, in due course, be available if FHWA keeps the pressure on as I am confident it will. In the process, the States will have acquired experience in all types of programs mandated by the act, which I would like to stress, they do not now have.

In this connection, it is worth noting that in those categories in which the States were most familiar, that is, bridge construction, funds have been committed at a great rate. In other less familiar areas, such as the safer roads demonstration program, the pace has been slower, as is illustrated by the second chart here.

In that chart, each of the programs of the 1973 act is separately addressed. There are three bar lines for each. The first, in blue, represents the amount of the authorization for each program. The red line indicates the amount of obligations for fiscal year 1974 and the green line, the obligations made in fiscal year 1975.

The first series of lines you will see is the rail highway crossing program. The next one is the bridge reconstruction program. The bridge reconstruction program has been on the books for several years now. The States have experience in it. They are committed to it and, as a result, you can see a great amount of money has been obligated.

With regard to the other programs, including on the right, the safer roads demonstration program, while a great deal of money is authorized, very little by way of obligation has actually been spent to date by the States. This was natural and to be expected.

But if we prematurely remove the emphasis and focus provided by the categorical approach, I fear that these promising starts in these new areas may be aborted. Some States are even lagging in carrying out the basic requirement of each of the categorical programs—the inventory to determine dangerous road conditions.

What this says to me is that some States have yet to make the commitment to, or gain the experience in, carrying out across-the-board safety improvements. What is more, a few are fearful of even launching such programs. To be sure, some States such as California, Ohio, and New Hampshire have long been road safety conscious. They have long been addressing road safety problems.

If all States were like them, a national program would not be needed. Most, however, are not. Most are lagging. Most have neglected systematic road safety improvements. Most have allocated most of their funds to highway construction. This does not mean, however, that most are not now moving in the right direction.

From its inception, the highway program has been evolving. In its early days, its primary purpose was to create basic transportation arteries, a circulatory system for the Nation, if you will. Then, half a century ago, after the basic road networks had been established, the era of improving mobility and efficiency began. This phase culminated in the creation of the Interstate System. Then just a decade and a half ago, the focus began to shift towards safety.

There is always a gap between the time an idea is transformed into policy, then into a program which produces results. The road safety construction improvements program created by the 1973 act is currently going through such a transition process. If there are ways to achieve this quicker and more efficiently than the categorical approach, I am not aware of them.

How much attention do you think off-system roads would now be receiving if it had not been for the safer roads demonstration program? How many two-lane, rural roads, where most of our fatalities presently occur, would be receiving center and edge lines had it not been for the pavement marking demonstration program? Yet, after 2 years of effort, in both areas, we have barely scratched the surface of what must be done.

The same can be said for the roadside obstacle program and some of the other programs. Across the board, the uneven progress of the various States suggests that, absent categorical approaches, many highway conditions in desperate need of correction will not be addressed.

Does this mean that the 1973 act is not in need of improvement?

It does not. States like Hawaii and Alaska, for example, which have virtually no rail-highway crossing problems, should be allowed to allocate their moneys to other safety areas. Conversely, States like Ohio, which do, should be allowed to emphasize such programs. Such flexibility can be accomplished within the framework of the categorical approach.

Consideration should be given to requiring certification of State highway safety construction improvement programs and assuring completion of inventories with the understanding that legal liability will only attach to those States which fail to implement an orderly program to eliminate the hazards, obstacles and other dangerous conditions identified.

Senator STAFFORD. Mr. Peet, your 15 minutes are nearly expiring. The Chair wanted to warn you that if you could, we would appreciate it if you could summarize the balance in the next couple of minutes. Your entire testimony, which is very helpful, will appear in the record.

Mr. PEET. Yes, sir.

Throughout the remainder of my testimony, I discuss several of the points that you raised and asked specifically for a discussion on, concerning NHTSA, with the greatest respect for Dr. Gregory who is here today, I feel that that agency is one which has never lived up to either its expectations or its opportunities.

There are many good things about it, but NHTSA has been a disappointment. As a standard setter, its efforts have borne little fruit. Until demands by the Congress changed its policy, virtually no evaluation or bottom lining of any of the standards or for that matter, any of its programs, was being done.

As the umbrella agency for the Governors' highway safety representatives, NHTSA has often sought to overcontrol while providing insufficient guidance and support. As the agency vested with the primary responsibility since 1966 for providing a focus for highway safety in the Federal Establishment, it simply has not delivered.

Accordingly, Citizens for Highway Safety recommends that the Congress review the policies, programs, activities and mission of NHTSA, with a view to making constructive changes in its structure and operations which will enable it to function more efficiently and effectively in order that it may achieve the goals and objectives for which it was created.

The 55-mile speed limit has been mentioned here today. It is most important that enforcement of the 55-mile be vigorously pursued. It seems to me that one possible way of encouraging this is through wider application of the incentive approach which was used in the 1973 act.

I agree with Dr. Gregory that not every standard issued by the NHTSA should be slavishly enforced. In some of the areas, the States should have the option of enforcing or not a constructive way of doing this and of accomplishing better enforcement of the 55-mile-an-hour speed limit might be for the Congress to mandate a new incentive program which would provide moneys to those States which would carry out specific types of approved programs. To encourage them to concentrate their resources, through incentives, to carry out those programs which they believe will produce the best results is, in our view, the best way to promote highway safety.

[The balance of Mr. Peet's statement follows:]

Overall, the safety improvements construction programs established by the 1973 Act should be extended for an additional two years.

And I would include in this recommendation both the pavement marking and safer roads programs, both of which offer tremendous lifesaving potential.

Mr. Chairman, at this point, I ask permission to submit to the Committee additional suggestions for improvements which we are developing at CHS for inclusion in the record at this point.

Now, I would like to address some additional areas of moment, including the ones specifically requested in the letter of invitation I received to testify.

SAFETY PROBLEMS AT RAIL-HIGHWAY GRADE CROSSINGS

Studies indicate that most rail-highway crossing accidents occur randomly, that is, it is almost impossible to predict in advance where such tragedies will occur. It is its random nature which makes the rail-highway crossing problem so difficult to address from a safety standpoint.

Where a mobility problem exists, either on a busy highway or a busy railroad connection, the problem is one of counting the traffic and, where efficiency warrants, separating, or relocating, the crossing.

Almost any railroad crossing can be dangerous to an unwary motorist or to an unwary child, riding in a school bus or bicycling. So how do we allocate the finite resources we have to address the problem?

The 1973 Act pursued a Solomon-like solution. It provided a floor of protection—that every railroad crossing in America be adequately equipped with passive warning signs—crossbucks and advance warning signs.

For the more highly traveled crossings, it provided funds for active protection—signal lights and other devices.

Finally, 50% of the funds were allocated for grade separation. Through this approach, it was hoped that an equitable start could be made towards assuring a steady upgrading of all crossings of all types in America.

Despite the even-handedness of this approach, it does have a flaw. Some states have more railroad crossings than others. In fact, some towns are literally inundated with crossings that tie up traffic for hours each day, causing serious economic dislocations as well as creating serious hazards.

To correct all of these crossings would take an astronomical sum of money. But some means must be found to address this problem because, while primarily a mobility concern, safety will always benefit when a busy, hence potentially dangerous, crossing is eliminated.

NHTSA—AN AGENCY WHICH HAS FAILED TO REACH ITS POTENTIAL

The National Highway Traffic Safety Administration was established by the Highway Safety Act of 1966. The hope of its creators was to provide an agency of the United States which would become the National focus for motor vehicle and highway safety.

NHTSA has never lived up to either its expectations or its opportunities. Since its founding, it has operated under three Administrators. All have been good, well motivated men. Unfortunately, all have pursued what can only be described as "panacea" approaches to highway and vehicle safety. The emphasis has been on dramatic solutions such as the Experimental Safety Vehicle (ESV), alcohol and the airbag instead of accomplishable ones. While promised solutions hold out the prospect of huge safety dividends, all have, thus far, proved illusory.

As one highway safety specialist, Dr. Lawrence M. Patrick, suggested at a recent conference on motor vehicle restraints: The efforts since 1966 have not produced any results that would not have been achieved with programs already underway. (Dr. Patrick is associated with Wayne State University in Detroit, Mich.)

As a research agency, NHTSA has been disappointing. As a standard setter, its efforts have borne little fruit. Until demands by the Congress changed its policy, virtually no evaluation or bottomlining of any of the Standards, or for that matter, any of its programs, was being done. As the umbrella agency for the Governors' Highway Safety Representatives, NHTSA has often sought to over-control while providing insufficient guidance and support. As the agency vested with the primary responsibility since 1966 for providing a focus for highway safety in the Federal establishment, it simply has not delivered.

All things considered, NHTSA is an agency which has failed to achieve its promise or potential as leader of and spokesman for the highway safety movement in America.

The Congress should review the policies, programs, activities and mission of NHTSA with a view to making constructive changes in its structure and operations which will enable it to function more efficiently and effectively in order that it may achieve the goals and objectives for which it was created.

THE INCENTIVE APPROACH TO HIGHWAY SAFETY, A NEW APPROACH TO SECTION 402 PROGRAMS

The traditional pattern of Federal programs has followed what is frequently described as either the "carrot" or "stick" approach. The "stick" philosophy comprehends a mandate by the Congress accompanied by substantial penalties for failure of performance by a state. Such penalties are written into the Federal-Aid Highway program, both in construction and highway safety. Despite poor performance, particularly in the safety sphere, there is a general reluctance to impose penalties upon a state.

It was recognition of the fact that the "stick" approach was not working well in highway safety that prompted the enactment of the Highway Safety Act of 1973. Thus, in addition to the Federal mandates established in the Title II highway safety programs, Highway Trust Fund monies and 90% or more Federal matching were provided—a carrot if ever there was one.

But, even the "carrot" approach has its detractors. Some would prefer a form of Revenue Sharing in which Federal tax monies would be turned back to the states with few or no strings attached. A variation of this is the recently submitted Administration proposal to dismantle the Highway Trust Fund, returning 1¢ to the states provided the states take certain taxing actions on their own.

But where there is a Federal mission and responsibility, and I believe there is in highway safety, yet another alternative, the establishment of "incentive" programs to encourage states to act in targeted areas, offers great promise. Under such an approach, where the Congress deemed a program desirable, but where it wanted to leave the final decision to the states, it would enact legislation outlining the program and make funds available as an incentive to states and/or localities which undertook to adopt and implement it.

In the 1973 Safety Act, the incentive approach was embodied in section 219. Under it, two programs were established: The first was to encourage states to approve safety belt use laws; the second was to reward those states which achieved the most significant reductions in death rates.

The theory of both was to introduce an element of competition, such as that provided in private business, to stimulate superior performance by state and local agencies. Regrettably, the safety belt incentive program was never carried out. I believe a great opportunity was thereby lost.

Awards have been made, however, to those states which made the greatest progress in reducing the death rates on their highways. A copy of a recent NHTSA release announcing states receiving incentive awards is attached.

There is substantial controversy at the Federal, state and local level as to which of the highway safety Standards and NHTSA programs should be given emphasis and priority. This controversy has become critical due to the fact that the allocation of Federal monies for implementation of the Standards and programs is, in toto, extremely modest. In addition, there is a wide divergence of opinion as to the value, importance, and bottom-line potential of several of them.

If an incentive approach were adopted, NHTSA could say, in effect, to the state and local governments, "These are the Standards and programs we would like you to implement and enforce. If you do, these special funds will be made available to you above and beyond grants ordinarily provided." Those states wishing to avail themselves of incentive monies could pick and choose those specific programs which accorded with their special interests and priorities.

In some cases, the Federal government should, of course, follow the traditional "non-incentive" approach, mandating particular Standards which must be met by all. In the majority of cases, however, the "incentive" approach could be followed to assure each state with a maximum of flexibility and independence in choosing those programs it wished to adopt, implement and enforce.

Where a state is right in its choice, good results will be achieved and demonstrated. Where a state is wrong, it will learn, by comparison, from its mistakes.

Incentive allocations will assure that there will be sufficient Federal monies for a state to participate in those programs it deems best without dilution of emphasis and effort for lack of funds. But it will put each on its mettle to demonstrate the kind of results which justified its decision.

Such an approach is in the best tradition of results-oriented American enterprise and competition.

HOW TO PROMOTE ENFORCEMENT OF THE 55 MPH SPEED LIMIT

In years past, highway safety programs have often been more rhetorical than practical, promising progress but producing no real dent in the accident/injury/death toll. No wonder the American people treated the subject with indifference, accepting the hazards and risks of highway travel more or less fatalistically. They simply did not believe that such programs saved lives. And to a great extent, that was the case.

Then came the 55 MPH speed limit. In a single year, fatalities fell by almost 10,000. Something meaningful had finally been done to arrest the toll of deaths and injuries on our highways. The fatalistic notion that 55,000 deaths were the necessary and inevitable price we had to pay for mobility was at long last laid to rest.

There were, no doubt, many factors at work which combined to produce the heartening results achieved last year. But the fact remains that spectacular reductions had actually been achieved.

Anyone traveling on a road where the 55 MPH speed limit is observed, can see why. Whereas, before enactment of the National Speed Limit, when 65 and 70 MPH speed limits were commonplace, the differential between the fastest and slowest vehicles on our roads was very great. In a 70 MPH zone, for example, drivers of cars and trucks were usually allowed a 5 MPH bonus before they ran afoul of the law. At the low end of the speed spectrum, was the 40 to 50 MPH driver. The differential between the two was as high as 35 MPH.

Since enactment of the 55 MPH speed limit, that differential has been lowered by over a third. The slow driver continues to travel at 40 to 50 MPH. But at the upper end of the spectrum, where the 55 MPH speed limit is enforced (with a 5 MPH bonus, of course) the differential has shrunk from approximately 35 MPH, to a more manageable 20 MPH.

The experts tell us that it is not speed that kills (although it occasionally does) but speed differentials, i.e. the differing speeds between the fastest cars and the slowest cars using the same stretch of roadway. The greater the differential, the greater the risk of accidents, injuries and worse.

By reducing speed differentials between vehicles, the 55 MPH speed limit saved lives. It will continue to save lives so long as that smaller differential prevails.

Some people complain that the 55 MPH speed limit should be repealed because it is not being enforced. In some states, this may be true. But in those that I am familiar with, it is being enforced. Of course, that customary 5 MPH bonus above the speed limit is still being allowed in most jurisdictions. But it was also being allowed when speed limits were as high as 70 MPH. So, in a sense, there was no enforcement of the higher speed limits either.

What can we do to assure adequate enforcement in all jurisdictions?

Since the payoff of the 55 MPH speed limit in conservation of fuel and safety is so high, it seems to me that a program to insure its enforcement would be a logical candidate for the incentive approach earlier discussed.

THE IMPLICATIONS FOR HIGHWAY SAFETY OF THE PRESIDENT'S PLAN TO DISMANTLE THE HIGHWAY TRUST FUND

Enactment of the President's proposal would have a drastic impact on highway safety programs. In fact, the President's plan could destroy much of the momentum gained in recent years.

One of the biggest breakthroughs in the 1973 Act was the provision of Highway Trust Fund monies as the source of funding for highway safety programs. Therefore, General Fund monies had been allocated for such purposes. Unfortunately, the amount of monies provided from the General Fund, through appropriations, never approached the level of funding needed to substantially reduce the carnage on our highways.

The programs of the 1973 Act are really just getting underway. Funds are now being allocated and momentum is being gained for targeted, high yield safety projects of the type that have never before been systematically undertaken by the states. If we are able to sustain this progress, the highway carnage can be markedly reduced.

Enactment of the President's proposal to dismantle the Highway Trust Fund could stop this escalating progress in its tracks.

Why?

Because the basic funding mechanism which has made this progress possible would no longer be available. Instead, highway safety would, once again, be relegated to its "stepchild status" in the competition for funding. But now, its competitors would not only be the highway construction program, but all other forms of transportation, as well as, all other governmentally funded programs.

The stakes in highway safety are much too high to either risk or tolerate such a de-escalation of effort.

This concludes my testimony. I appreciate the opportunity of appearing here today and stand ready to answer any questions which may be addressed to me.



DEPARTMENT OF TRANSPORTATION

NEWS

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

WASHINGTON, D.C. 20590

FOR RELEASE FRIDAY P.M.
March 21, 1975

NHTSA -- 23-75 (HP)
Tel. 202-426-9550

The U. S. Department of Transportation today announced the award of more than \$13 million in incentive grants to 23 states and the District of Columbia for achieving significant progress in reducing their highway fatality rates during calendar year 1973.

The incentive grants were authorized by Congress to encourage states to develop and implement effective measures for reducing their highway fatality rates (number of highway deaths per 100 million miles of vehicle travel). Amounts awarded to the qualifying states are equal to 25 per cent of the federal funds apportioned for Fiscal Year 1975 for the highway safety programs of those states.

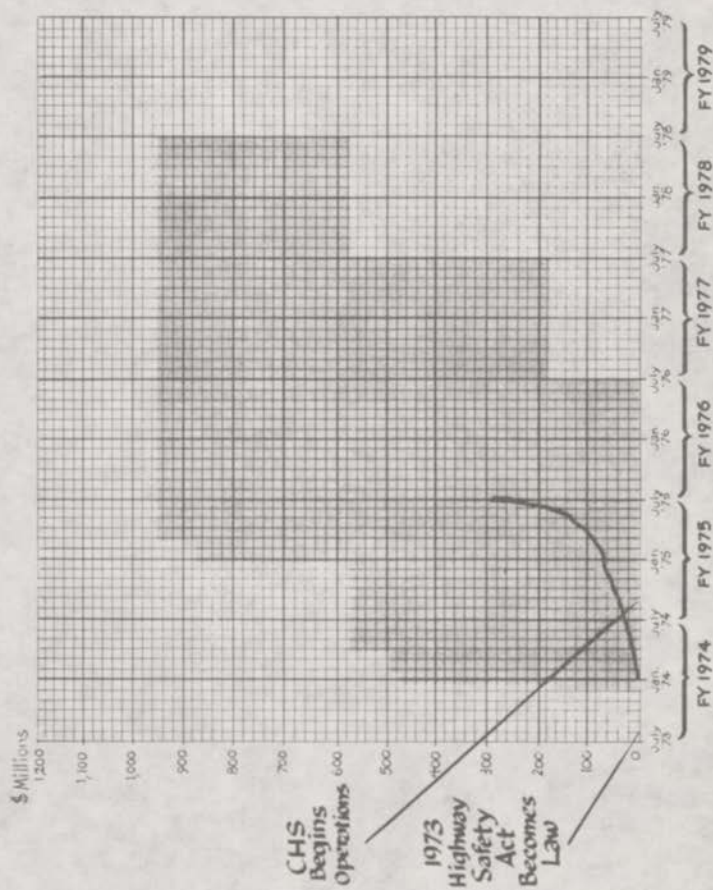
The qualifying states (ranked in the order of their performance) and the amount of their awards are as follows:

- | | |
|---------------------------------|---------------------------|
| 1. New Hampshire \$194,000 | 4. Oregon 510,000 |
| 2. District of Columbia 194,000 | 5. Oklahoma 623,000 |
| 3. West Virginia 325,000 | 6. South Carolina 505,000 |

7. Hawaii 194,000	16. Ohio 1,727,000
8. Kansas 632,000	17. Alaska 194,000
9. Montana 268,000	18. Colorado 489,000
10. Tennessee 737,000	19. Nevada 194,000
11. Washington 658,000	20. Missouri 930,000
12. Virginia 789,000	21. Maryland 597,000
13. Maine 194,000	22. Indiana 931,000
14. Delaware 194,000	23. Iowa 672,000
15. Nebraska 435,000	24. North Carolina 912,000

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Obligation of Funds by the States Under Title II of Public Law 93-87 The Highway Safety Act of 1973*



— OBLIGATION OF FUNDS BY THE STATES UNDER TITLE II OF PUBLIC LAW 93-87 -- THE HIGHWAY SAFETY ACT OF 1973.

▒ LEVEL OF TITLE II FUNDS APPORTIONED OR ALLOCATED TO THE STATES AND AVAILABLE FOR OBLIGATION.

* OBLIGATIONS FOR 5 TITLE II PROGRAMS ARE CONTAINED IN THIS CHART. THEY ARE:

- SECTION 203 - RAIL-HIGHWAY CROSSINGS
- SECTION 205 - PAVEMENT MARKING DEMONSTRATION PROGRAM
- SECTION 209 - PROJECTS FOR HIGH HAZARD LOCATIONS
- SECTION 210 - PROGRAMS FOR ELIMINATION OF ALCOHOL-RELATED TRAFFIC ACCIDENTS
- SECTION 230 - FEDERAL AID SAFER ROADS DEMONSTRATION PROGRAM

BECAUSE OF THE SPECIAL NATURE OF THE PROGRAM, OBLIGATIONS FOR SECTION 204 BRIDGE RECONSTRUCTION AND REPLACEMENT, ARE NOT CONTAINED IN THIS CHART.



FUNDS APPORTIONED OR ALLOCATED UNDER TITLE II OF PUBLIC LAW 93-87*
THE HIGHWAY SAFETY ACT OF 1973

Type of Funds	Section #	FY 1974		FY 1975		FY 1976		TOTAL TITLE II APPORTIONMENTS
		Date apportioned or allocated	Amount apportioned or allocated	Date apportioned or allocated	Amount apportioned or allocated	Date apportioned or allocated	Amount apportioned or allocated	
Pavement Marking Demonstration Program	205	1/10/74	\$24,350,000	2/13/75	\$75,500,000	2/17/75	\$72,750,000	\$170,500,000
Projects for High Hazard Locations	209	11/29/73	\$48,500,000	12/24/73	\$75,500,000	12/11/74	\$72,750,000	\$194,750,000
Program for Elimination of Roadside Obstacles	210	11/29/73	\$24,250,000	12/24/73	\$75,500,000	12/11/74	\$72,750,000	\$170,500,000
Rail-Highway Crossings	203	11/29/73	\$24,240,374	12/24/73	\$75,470,824	12/11/74	\$63,912,620	\$161,623,818
Federal-Aid Safer Roads Demonstration Program	230	11/29/73	\$50,000,000	12/24/73	\$100,000,000	12/11/74	\$95,594,000	\$245,594,000
TOTAL			\$171,240,374		\$395,970,824		\$377,756,620	\$942,967,818

* Excluding Sec. 204, Bridge Reconstruction and Replacement Program.

Senator STAFFORD. Thank you, Mr. Peet.

We thank all of the participants on the panel thus far for their contribution to our efforts on the new highway bill.

The Chair will now ask Mr. Pat McCue, if he is here, from the Association of American Railroads, if he cares to join the panel; Mr. Gilbert Carmichael, of the Highway Safety Advisory Council, if he also will join the panel.

If you have written statements we will include them in their entirety in the record.

[Mr. Carmichael's statement and subsequent submission appear at p. 1514.]

Senator STAFFORD. The Chair would like to address the first question to Dr. Gregory and Mr. Fisher or either of them. Would you discuss what each of you would consider must items required to be implemented by all States as national standards?

Mr. FISHER. Mr. Chairman, I think there are certainly items of issues or elements that can be identified that should be common to every highway safety program in the Nation. I think there is a minimum amount of recordkeeping, for example, that all of us should do. What that minimum is precisely, I don't know; but the minimum amount should be a record system that delivers the data to Congress on which it can make some decisions.

I don't think, for example that the record has to be so extensive as some inquiries have been a few years back to tell me how many pickup trucks lost the left rear wheel because of a lug nut going off. That is pretty extensive.

I think there are basic laws as foundation elements that all of us need to adhere to, particularly with the interstate travel. Our Nation is a nation of travel. Certainly those standards of law should be reasonably equal across the Nation.

Third, I think there has been heard on the FHWA side, some performance standards for road design that could become, what I call or what the Conference calls, minimum level effort that should become the base of the foundation.

Senator STAFFORD. Dr. Gregory, I will restate the question which we addressed to you and Mr. Fisher. Could you discuss what you would consider must items required to be implemented as national standards?

Dr. GREGORY. Thank you, Mr. Chairman.

I apologize for being out of the room. I was giving my seat up to what I thought were two additional presenters.

I will review the history briefly in the event Mr. Fisher has not. In an attempt to focus on various parts of the standards several years ago, 13 so-called must items were developed. We have reviewed them with the idea of looking at them from the standpoint of their impact based on data or in some cases, the results of the program as we have seen them. As a result we have narrowed emphasis items down to five items on which we feel there is good and sufficient reason to place emphasis.

One, I mentioned in my testimony pertains to motorcycle helmet legislation requiring a helmet law for motorcycle operators and passengers. Second, in view of the fact that at least half and in some cases, more than half of the fatalities and injuries that occur on the highways are due to the drinking driver, I insisted upon the passage of a presumptive or prima facie blood alcohol concentration of 0.10 or lower.

Certainly, emergency medical services, which Mr. Fisher highlighted as one of the major improvements that has been made since the passage of the Highway Safety Act, is important. This item involves principally the development and national implementation of a fully comprehensive medical services plan by a State. This includes training and certification of ambulance attendants which, in many cases, has had to be done through enabling legislation of the State legislature.

Selective traffic enforcement, the establishment of procedures for zeroing in on high accident locations and areas, is another important area. Also there is motor vehicle inspection. We are requiring that the States implement a plan for inspecting motor vehicles on a regular basis in order to keep vehicles in safe working order.

In addition to these five items, we have consistently stressed the need for good, safe operations of the Nation's school buses. This, by and large, has been done rather well by most of the States and all but six at the present time are either implementing, or have already fully implemented what we consider to be satisfactory programs.

Senator DOMENICI [presiding]. Dr. Gregory, and panelists, Senator Stafford had an emergency. He should return in about 15 minutes. If we don't get ourselves caught in voting, we will be here until noon.

Dr. Gregory, on an aside issue last year, as you recall, we had the 55-mile an hour speed limit coming into being and we engaged in some discussions as to whether or not this period of time which we thought then might be very temporary, would be a useful interlude to truly gather some statistics on speed versus safety.

I assume that is being done and that there are some very important statistics being gathered. Is that correct.

Dr. GREGORY. Yes. As a matter of fact we have gone quite far in establishing a new fatality analysis file in which all highway fatalities are examined as to cause to determine the relationship to speed, alcohol, and so forth.

We are also establishing what amounts to a statistical sampling of injuries that occur on the highway, so that we can issue, what I term, an injury index. In past years, we have concentrated so heavily on fatalities that we have forgotten another major problem: Highway accidents which produce injuries.

We are working very hard in both of these areas. Our fatality analysis file now has sufficient information, and we are beginning to find relationships between accidents and speed, motor vehicle problems, alcohol, driver training, and other areas.

I know that in the past, we have discussed the problems of trucks, and I am glad to say that we have also made progress in that area, although you may wish to ask questions on that later.

Senator DOMENICI. Senator Stafford asked this question with reference to must items for discussion, Dr. Gregory and Mr. Fisher. We certainly do not want to preclude any of the other panelists in discussing that item.

STATEMENT OF GILBERT E. CARMICHAEL

Mr. CARMICHAEL. I am Gil Carmichael of the Highway Safety Advisory Committee.

In our Advisory Committee study we have been quite concerned with the functioning of NHTSA with the Governors' highway safety

representatives. The Congress has created quite an unusual animal in our eyes. We have a Federal program that has to be excluded from the Federal level by the State employees without the normal operations that you have in FHWA.

We see the Governors' highway safety representatives needing enhancement, identify in executing this program. Mr. Peet, awhile ago, made a fairly tough statement about NHTSA's performance. We think part of the problem lies in two areas:

1. The standing or the functioning of the Governors' highway safety representatives within their States in carrying out a Federal program of this type.

2. The other is the lack of a data gathering system, a national data gathering system which seems to be very important and the Advisory Committee is pushing hard for it.

We have submitted a draft statement in the record and it speaks to the point.

We think it is quite possible that a new standard could be evolved, call it a national data gathering standard, or an accident reporting standard or system.

We think that there is some difficulty with the Federal Government performing it. This new standard could very easily be carried out by the National Conference of Highway Safety Representatives, the Governors' representatives in their Washington office. We would like to see a joint venture between the Federal Government and the Governors' highway safety representatives in setting up and in carrying out a computer gathering service, an accident gathering service, a much more simplified national accident report form.

We think it would bypass the concept of big brother looking in on the whole Nation.

In quick summary, several of these present standards could be brought under one new data gathering standard or accident report standard, whatever name you prefer to give it, and that the Governors' safety representatives in their Washington office could be the operators of it and the gatherers of it.

I believe we have got enough facts, figures and information now available that if we started to gather it on a systematic basis through them you could evaluate an awful lot of these programs quickly.

So several standards come under one new standard.

Senator DOMENICI. That is in response to one of the things that you think is a must item?

Mr. CARMICHAEL. Yes, sir; very much so.

Dr. GREGORY. May I make one comment, Senator Domenici?

We are always talking about the bottom line of highway safety. We have to operate as much as we can on the best data that we can obtain. I fully agree with the concept of getting better accident and better facility data, and that is exactly what NHTSA is doing.

I am often asked whether the standard that we already have for collection and analysis of data is one of the bottom line must items. My reply has always been that it is the bottom line, and I really don't see how any State or any community, or we at NHTSA, can operate to provide the important programs and to measure the effectiveness of those programs, without adequate data.

I am glad to say, by the way, that many of the States have come up with rather sophisticated methods of collection and analysis of data, and it is on this basis that many of them are now able to assign

priorities in their programs. They are able to find out where the problems are and impact those problems at the earliest possible date.

Whether we need to go further in institutionalizing this data collection is a matter that we have under consideration now in the two programs, the fatality analysis file and the accident analysis file that I mentioned. We are now attempting to identify just how far we should go on a national basis.

Senator DOMENICI. Thank you.

Mr. Delibert?

Mr. DELIBERT. Yes. We are very disturbed really that in talking about the highway safety program there really seems to be an almost exclusive concentration on the NHTSA. People tend to forget from time to time that the Federal Highway Administration is responsible for three and one-half of these standards and we think three and one-half of the most important ones.

In particular, I believe they are responsible for enforcement of the traffic records standard. We think that it is their either unwillingness or inability to enforce that standard that has disrupted all of the other programs. Here we are 9 years after the passage of the 1966 Highway Safety Act and we still don't know where the problem is. We don't know and we can't identify the major elements and determine which of the other program standards are intelligent attacks on those elements.

This is because of this failure at the Federal level and the failure at the State level to implement these programs. We know a couple of States where the State police department changed the accident reporting form without telling the highway department and then the accident report forms wouldn't go into the highway department's computer anymore.

We know of States where the highway department and the motor vehicle division are fighting over the computer and over whose ends this computer is going to serve, and so on. The result is disruption of all of the other elements and all of the other standards.

Mr. PEET. Senator, I would like to make a severalfold comment. Concerning data gathering, one of the primary purposes of the 1973 Safety Act was to provide for the first time a requirement that with regard to each different category of program that specific before and after results would be studied and analyzed in order that we could establish, by the conclusion of these programs, a priority for such programs which would have the best payoffs per investment.

Another provision of the 1973 act related to the establishment of a national center for the statistical evaluation of highway accidents, a feasibility study.

That study has recently been completed by MHTSA. I believe, if I state it correctly, that NHTSA suggested that such a national center not be established at this time, that the resources to establish it not be requested. Am I correct?

Dr. GREGORY. In looking at the feasibility of such a center, the answer is, yes, it is feasible. The cost would run in the neighborhood of \$100 million for the first 6 years, I believe. There is nothing wrong with establishing a center, if it is needed.

We have proceeded in this fatality analysis file and in responding both to Mr. Delibert's questions and Mr. Peet's, we actually do have a standard form 56 nationwide. It contains all of the elements which I

mentioned by which we are able to analyze all fatalities. We believe that this beginning is a good start on what amounts to a national data collection system.

I am encouraged and enthusiastic about the ultimate use of this file.

Admittedly, in the accident and injury analysis we are taking a national sample which we, on the basis of good professional statistics, believe will reflect the national picture. This, too, will go a long way toward our ability to identify the cause of accidents.

I would like to take my friend, Governor Tiemann, off the hook for the moment. The traffic records standard is the responsibility of NHTSA. I would also like to say that we fully appreciate the data gathering efforts which continue in the Federal Highway Administration, of which we take good advantage.

Mr. PEET. May I continue? I had not concluded, Senator.

One of the things that has disturbed us considerably is the fact of the lack of evaluation to assure that the programs being concentrated on are, one, cost-beneficial and two, are capable of achieving results.

My observation of NHTSA from the beginning, from 1966 on, has been that they have pursued what you can call panacea programs. First it was the experimental safety vehicle. When it was perfected, we were going to eliminate traffic fatalities.

Then we were going to get all the problem drinkers off the road. Then it was the air bag, which was going to eliminate the problem of traffic fatalities.

Personally, it is my observation, that the improvements that are going to end up substantially saving lives across the board on our Nation's highways are incremental programs, a little bit here, a little bit there; identifying those areas that have real payoff potential and pursuing them, not only through mandates but through money to get those corrections actually made.

In connection with the Governors' representatives, I have had the opportunity of personally observing their evolution over the past few years and I must agree that I think that they are coming onstream and are becoming quite a constructive group of people nationwide.

The one problem that we haven't solved on a national level for them is their status within their States. Some Governors' representatives enjoy good status, good communication, good authority.

In many States, the Governors' safety representative is sandwiched down in at best an advisory role and at worst something less than that.

Mr. FISHER. Mr. Chairman, if I may just address the three points that have come up with respect to the original question, and respond to Dr. Gregory with respect to safe operation of schoolbuses, we wholeheartedly agree.

I would like to bring to your attention section 406, which has a categorical grant that earmarks funds specifically for schoolbus driver training.

In my State, I contend that mechanic training and the maintenance of the bus is just as important as the training of the operator. Some States, simply because of this 406 requirement, were forced to replace State funds with Federal funds. I would like to suggest, sir, that you look at putting this back in the 402 category, and again let the State's program within the standards and within the framework and within the spirit of 402.

This is a very narrow constriction and it may be the desire of the Congress that it remain that way, sir. But I call this to your attention to let you know that it does really put us in a box on that one issue.

The "bottom line" is a phrase that we have heard, and I think it depends on your point of reference. This is where we, with this jointly administered program, begin to get into trouble, at least from the State's perspective.

The bottom line to me has at least two connotations: One, if we are talking about serious injuries and fatalities we are talking about a rural phenomena. That is where people die in this country. This is where people are seriously injured; the vast majority at least.

If we are talking about congestion, on the other hand, in the metropolitan centers such as Atlanta, then I think the bottom line is something entirely different. We are talking about congestion, traffic operation, and moving the traffic.

It is in the context of the State's highway safety program that somewhere these two administrations have got to decide what "bottom line" is, instead of one saying one thing and one the other. Let's get together.

Third, the traffic records standard, as Dr. Gregory pointed out, is an NHTSA standard. We have what we, in the trade, call the cookbook from NHTSA, and I believe PPM-16 from FHWA, addressing the same subject in a different way.

Senator DOMENICI. I hope somebody transcribes that last sentence so we will know the state of confusion.

Mr. FISHER. Finally, sir, and I may be getting ahead of myself, when we look at the bottom line and the administration of the standards there are two sides of the House. A letter from FHWA was called to my attention recently that said a State was lapsing funds from the FHWA side, therefore the State's program was unbalanced. This same state, incidently, received a bonus for fatality reduction.

I don't know how the program could be unbalanced when the State received an incentive grant for a significant fatality reduction. Thank you, sir.

Senator DOMENICI. Governor Tiemann, do you have any comments on the questions and answers?

Mr. TIEMANN. Probably only a very, very quick one. I thank Dr. Gregory for straightening up Mr. Delibert's error. Secondly, I think we need to keep in focus the slowness of which the safety projects get underway. You will recall, Senator, that our topics program took several months before the angle of attack finally straightened up.

The same thing we are seeing now with Mr. Peet's chart. We had a goal in fiscal 1975 of \$250 million set for the six categorical grants. The State obligated \$445 million. In addition to that, \$632 million for regular safety funds.

So we feel that the thing is moving very quickly. Some of the problems we have to work out, as Mr. Fisher points out, are the PPM's—policy and procedures memorandums—by which we run our shop, and we are translating those into regulations.

We have been working in very close cooperation with NHTSA and intend to continue to do so. I think with all the efforts we have here and the development of these hearings that will be accomplished.

Senator DOMENICI. I will direct this question to Mr. Tiemann. Then they can comment on it. It is sort of asking you to respond to several things that have been said.

I think maybe you talk about them in your prepared remarks, but there has not been a subsequent dialog on them.

Mr. Delibert has called to our attention some apparent serious failures on the part of the States to incorporate latest safety features and new construction.

He cites failures by FHWA to set standards which require States' adherence to acceptable safety procedures.

Could you respond to that? Then we can have some dialog.

Mr. TIEMANN. Sure; I will be delighted to. First, the horror film you saw on highway safety, I think gets to the heart of what Mr. Delibert has been attempting to prove. It is very helpful.

I am not derogatory in my remarks, but we will take all the help we can get wherever we can get it. If they call our attention to errors in construction, we most certainly want to correct that.

The whole Federal-aid highway program has been based on one of complete cooperation and coordination between the Federal Government and the State governments. We are very reluctant in our regulations to put in "Thou shalt" do something. That has not in every instance been productive.

We feel that the States have been making good progress. With regard to the slides that we saw this morning, that highway project has not yet been accepted by the Federal Government.

Those errors in construction, if you please, will be corrected before it ever will be accepted as a part of the Federal Aid Highway System.

We have been working very closely with the States to upgrade the training of their safety engineers. I don't agree that the safety engineers, design engineers, are far down the category as far as the priority in the whole Federal-aid program is concerned.

I do agree that perhaps more emphasis ought to be given to upgrading that training and making it more ongoing rather than a one-shot deal.

With that, we are in complete concurrence.

Senator DOMENICI. Mr. Delibert, would you comment on that and add a dimension that has been of concern to the committee? That is the desire to incorporate the latest safety designs with the difficulty that is created because the new developments are occurring so rapidly.

You know, it takes so long to get a project committed, engineered, designed and to bid. If you would discuss that aspect of new development occurring rather rapidly along with his response to my question, I would appreciate it.

Mr. DELIBERT. Before I start this answer, I ought to apologize to Governor Tiemann for the error in the last one—and transfer the thrust of my comments to Dr. Gregory.

It is true that this project in Virginia has not yet been accepted by the FHWA. But the project is open to traffic and, of course, it is one of the busiest locations in the whole State of Virginia.

One of the things that we understand has been implemented recently in Virginia, and we would like to see implemented in every State, is a review of a project at the time that it is open to traffic, a safety review, even if the final inspection and acceptance by FHWA may be a year away because the landscaping isn't done.

We would like to see these projects reviewed for safety before they are open to traffic.

The other comment that I would have about that is to remind the FHWA that they had a legal requirement spelled out in title 23 to review and approve the PS & E for this project before a Federal commitment to financing was ever made. Presumably, their engineers went over this project in some detail at that time.

As regards the fact that of course some of these projects were designed some years ago while new safety developments are happening fairly fast; some of the errors that we have seen in this project and in a number of other projects that we have looked at in the last few weeks, are items where the correct way to do these things is spelled out in FHWA directives or publications or NCHRP research reports going back 2 years, 4 years, even 5 years.

I would agree with you that there is a problem of getting new research onstream quickly. But I don't think that is responsible for a lot of the things you saw in the slides this morning.

Senator DOMENICI. Mr. Peet?

Mr. PEET. May I make a comment, Senator, on this very point? It seems to me that the whole highway program is in a period and has been from the beginning, of evolution. At the outset, we were simply trying to build highways from point A to point B and there was very little emphasis on any sophisticated types of systems.

Then starting about 20 or 30 years ago the highway program began to concentrate on substantial improvement of mobility and efficiency.

This period culminated with the Interstate System, which has yet to be completed. About a decade and a half ago, safety began to come onstream. It began to become a concern.

It takes time for an idea to be transformed into a concept, to be transformed into a policy and then into a program and finally into implementation in which these improvements are being actually constructed into the highways of our land.

We are ahead of the game, as Governor Tiemann has pointed out in those areas where new construction is taking place. I have heard up to 25 percent of all new construction involves safety types of improvement.

But there are only 10,000 or 12,000 miles of new construction going on each year in the highways of our land. With regard to the other 2 million miles, we are just beginning to barely scratch the surface on systematic safety improvements.

This is the area that really deserves a great deal of attention because, as someone on this panel correctly pointed out, I think it was Mr. Fisher here, the problems of fatalities on our highways and serious injuries, are primarily a rural problem, and it is in those rural areas where those roads need the greatest amount of protection, the greatest amount of enforcement of the laws and the like.

Senator DOMENICI. Perhaps the chairman of the subcommittee has some questions. I have two or three more. I certainly would defer at this time.

Senator BENTSEN [presiding]. Why don't you go right ahead, Senator?

Senator DOMENICI. Thank you, Mr. Chairman.

Let me just pursue a couple of the subjects that have been bothering me that we worked on last year.

Mr. Tiemann, let me refer specifically to the program that we initiated for marking rural roads. I think Senator Bentsen and I

heard testimony last year in great detail as to where the real fatalities problems were and as a result of that I think Senator Bentsen will recall that we put a substantial amount of money into the act to try to get some lining and marking of the so-called two-lane rural roads, which I think unequivocally we found out last year are the real death hazards of the country.

Now I am referring to the diagram which would indicate that we have spent very little of that money—almost none discernible above the zero mark.

Can you describe the problems that you have found there and how we might help to expedite it?

Mr. PEET. Senator, on that chart, if I may interrupt, for fiscal 1975 very little was spent. For fiscal 1975—

Mr. TIEMANN. In fiscal 1975, \$58 million obligated, compared to \$1 million in fiscal 1974.

Senator DOMENICI. Could you give us some analysis of where that is going and are we going to reach the expenditure goals contemplated in the act within the 3-year period and are we at least making some substantial headway?

Mr. TIEMANN. There is an unobligated balance of \$111 million left. I would assume in a 2-year program that that would be obligated by the end of that time.

Senator DOMENICI. Are you finding any difficulty in the way the act is drawn in terms of getting that money out and being sure that it is really being used for those purposes?

Mr. TIEMANN. No. We are not anticipating any difficulty in the pavement marking. In fact, that is one of the easiest ones compared to the safer roads.

Senator DOMENICI. At the same time when that subject was discussed last year, as I recall, both Senator Bentsen and I raised the serious question about the way our roads are marked, not so much in Texas and New Mexico as around here.

By marked, I don't mean the line in the road, but I would suspect substantial accidents are occurring in metropolitan areas because people don't know when to turn off where. Sometimes the arrow telling you that that is the exist to go to Dulles in past the intersection.

If you are a tourist, you are just apt to stop. There is an accident or you turn off on the wrong one because there are no uniform national requirements apparently for doing this the same way within reasonable guidelines across the country, such as marking of exits, and so forth.

Senator BENTSEN. Let me interrupt there because that is one I feel strongly about and get parochial just a minute here. Who has the responsibility for the markings when you go down George Washington Parkway and places like that?

Mr. TIEMANN. George Washington Parkway is the Park Service, part of the Interior.

Senator BENTSEN. Do they have any communication with you?

Mr. TIEMANN. Yes.

Senator BENTSEN. I couldn't agree more that what Senator Domenici said how many times I have reached some exit and find that the marking is up as you have already reached the exit with no prewarning at all.

Mr. TIEMANN. We understand that. As a reasonable newcomer to this city, coming from a Plains State, as you two gentlemen, it is really difficult.

It is really difficult. It is much better than it was. Over the years working with AASHTO we have uniformly had signs.

Senator BENTSEN. I am glad I wasn't here whenever it was worse. If it has improved, I haven't noticed it.

Mr. TIEMANN. I am talking about nationwide.

Senator BENTSEN. I am talking about right here in Washington, D.C.

Mr. TIEMANN. In my comment where I am talking uniformity of signing we are talking nationwide standards.

Senator BENTSEN. Yes, but the message hasn't gotten through apparently to the Park Service here.

Mr. TIEMANN. To get specific with your comment on George Washington Parkway, which is the responsibility of the Park Service, part of Interior, we have an agreement with them on the construction. We do their construction work for them. They hire us to do that. We have this agreement with which we are attempting to solve this signing problem.

We think, given a little time, we hope to solve it when the construction is finished. Much of the problem is when you have highways, as I-95, that are only partially open to traffic. When it is fully open to traffic, some of those problems resolve themselves.

Senator BENTSEN. No; it is much more than that. You can go down the established parkway, turnoffs for bridges, and find the sign there is at the immediate turnoff, rather than at any point at any time.

I defy you to take someone who doesn't know Washington, D.C. well and have them not miss about two or three exits.

Mr. TIEMANN. I am not going to sit here and fight the Park Service battle for them. All I am relaying to you is that they have a responsibility for it.

Senator DOMENICI. They are not the only ones in the area. If you take the Interstate, it is pretty poorly marked around here when you compare the markings in the Plains States and having served there, it seems to me that the Federal Government was placing all kinds of requirements that we do those kinds of things right back there.

I don't see any similarity between that kind of requirement in Texas, New Mexico, and Wyoming, and what we have here as to how close exits are, together on the same freeway, overlapping, coming on into the mainstream and then 80 feet up the road, there is another one.

Maybe it is the exigencies of trying to accommodate everything that was there already and build the freeway and beltway. I see that as some of the problem.

Let me get back to the Federal responsibility. We didn't pass a law on the subject, but the report language was pretty strong that we ask you people to begin and to report to us on how we might improve this situation nationally. That is my recollection of how we handled it, Mr. Chairman.

I do hope that you are taking that mandate seriously and that we will get some suggestions on how we might help you.

Visiting some of the European countries, I just can't believe in this particular area of uniform instructions and signing and nomen-

clatures how far ahead they are of the United States. We have developed very few markings that are uniform everywhere that everybody understands and very few dimensional limitations in terms of standardization.

Let me just ask two or more questions.

Mr. DELIBERT. Could I make one brief comment? This particular standard, the one that covers this, is the "Manual on Uniform Traffic Control Devices." One of the things we found in our research, and it was also noted by the House Public Works Committee last year, was that the MUTCD was one of the standards that used to say that a State "shall" do thus and such in marking its highways. But it was recently doctored to say that a State "should" do thus and so, apparently because the States were afraid of increasing their legal liability by having something down in black and white saying "Thou shall do this." That standard has been doctored from the 1961 edition to the 1971 edition.

Mr. PEET. One more footnote on history here: During the formative stages of the 1973 Act in the House, there were several Members who were as deeply concerned as you gentlemen are over the Park Service problems, and consideration was seriously given at that time to the establishment of a separate program for the Park Service throughout the United States to assure that the Service would begin—would have the money and would begin to observe the uniform manual with regard to all of these matters.

Senator DOMENICI. I am not going to engage in an argument with my distinguished chairman because I think we are both looking for the same thing.

I really would be reluctant in this area to single out the Park Service as a violator and to set another kind of mandate for an individual agency instead of looking at the overall problem.

I don't want to waste any more time on this subject because the chairman has some questions, and I have to leave.

I want to go back to what appears to be some contradictory opinions on the pooling of all of these programs versus keeping them separate. You were the principal spokesman, Mr. Peet; and since these are experimental, and they are going to yield some information that might give us a national approach, that it is my understanding you would not like to see the consolidation of these categorical programs.

I think that was the thrust of what you said.

Mr. PEET. At this time; yes, sir.

Senator DOMENICI. I wonder, however, if you would not agree that we already know enough about the needs in some States that are extremely critical that we might at least provide some flexibility where rather than wait around for another 2 or 3 years to get the information in one area, that there may be some interplay between the funds.

Mr. PEET. Yes, sir. I would recommend that flexibility be written into each of the provisions to assure that if a State felt it was on top of a particular program, such as the railroad crossing program, in Hawaii and Alaska, that they could devote their money to another safety area which they thought had high payoffs.

To say that, however, I think that if the Congress moves prematurely to do away with these programs, I do not think that we are going to get the results in the form of "before" and "after" evaluation,

which is the primary purpose of the entire program and which will insure ultimately that all of these matters are addressed in a future consolidated safety category.

Senator DOMENICI. Did you have a comment on that?

Mr. McHUGH. Yes. I am representing the Association of American Railroads. I would like to support Mr. Peet's position on that, that it is our feeling that the experience has pretty adequately shown that the States really don't have the commitment to at least all of these programs.

I don't think they have a commitment to highway safety in general. I think that has been demonstrated many times. They don't have the same commitment within the categories to each of these programs. Consequently, if you look at Mr. Peet's presentation, you see, for example, in the bridge reconstruction there is an enormous amount of money spent on it.

But certain other programs that the States are less dedicated to but are certainly no less important are not receiving that same attention. The fact that those programs are categorically funded means that eventually the States have to make that commitment financially to the programs whether they agree with it or not.

I believe that is one of the points Mr. Peet is making, that the policy and the direction really needs to be established by the Congress. We want to provide enough flexibility to make sure that the States can manage the program reasonably but also to see that the States are giving proper attention to the areas that need the attention.

The off-system roads, I think, are extremely important, and as far as the railroads are concerned, 80 percent of our problem, 80 percent of our accidents at 80 percent of the crossings are on those off-system roads. There was no attention whatsoever given to that problem until the 1973 Highway Act.

Since the passage of that act, the Association of American Railroads published 40,000 brochures to local Government officials simply advising them that the money was available, and within a period of 1 year all the brochures were gone. We are reprinting again.

I spend almost 100 percent of my time simply dealing with those local officials who are overwhelmed with possibility that there may be some support in that area. We have identified in the past month almost 5,000 projects that are now underway.

As Governor Tiemann pointed out, it takes time to get these projects on line. It has taken about 2 years since the 1973 Highway Act. If we make a change now when the program is really less than 6 months underway, I see an abortion of the success that we are finally beginning to achieve.

It may be that eventually these programs can be combined. We believe it would be a serious mistake to do that at this time.

Senator DOMENICI. I think it would only be fair to let Governor Tiemann respond in this area because, basically, the administration proposes some significant consolidation in this area. I would like you to explain it within the context of the various thrusts this morning and give us your version of its consolidation and need for it.

Mr. TIEMANN. Two comments generally, Senator: We don't really identify the seriousness of the problem of the merger of the safety categories as has been identified here this morning.

We have attempted in the administration proposal to give the States the flexibility to put the emphasis where they think it ought to be.

That impinges heavily on your comment on Mr. Peet's draft showing the large amounts of money for bridge replacement. We recognize that, that a State by the virtue of the fact that a bridge project is a big dollar project, very few could eat up all of the highway safety program money.

So we wrote into our regulations that not more than 30 percent of the highway safety funds can be utilized for bridge replacement to prevent that very thing from happening.

We don't see the dangers—let me continue. Of the tremendous backlog of substandard bridges, we have identified at least 16,000 that ought to be replaced at a cost of something like \$10 billion.

Obviously, it will be a number of years before we can accomplish and accommodate those needs.

Let me conclude by saying that I don't share completely the feelings of these gentlemen, but I understand why they are nervous about the merger of these categories, the same as many of the Congressmen are nervous about the merger of all of the other categories, the 38-some that are all the way across or in the 1973 act.

We don't believe that the merger will do anything detrimental. In fact, we think it will help because as we indicated, it gives the States the flexibility they ought to have.

Senator DOMENICI. Let me ask you this question: As I understand each of these categories is preceded by a mandate in the statute that the State make an inventory of that problem.

Mr. TIEMANN. Yes.

Senator DOMENICI. There has been a suggestion that ultimately all of those areas ought to be inventoried and related.

I assume that based upon your notion of consolidation that you would not want that to be used by a State to thwart an inventory, an overall State inventory of one of these vital areas.

Mr. TIEMANN. No.

Senator DOMENICI. You would want them to continue on that even if they had chosen in the merger to direct, subject to some limitations like the 30 percent on bridge crossings, to proceed to expend money, but also to proceed to inventory the safety needs in the categories that are in the law; is that right?

Mr. TIEMANN. That is correct, Senator.

Senator DOMENICI. Any other comments? Yes.

Mr. PEET. Senator, I think you use a very good term when you said some of these gentlemen are nervous about the administration approach. I am nervous personally because it seems to me that not only would the categories prematurely merge the safety efforts, but also the amount of funds allocated to these categories would in effect, in practical effect, be very substantially reduced.

I agree with Governor Tiemann that a very vital problem to be addressed in our highway program relates to bridge reconstruction and replacement.

I also agree that if within the administration's \$400 million bill the States had their druthers, most of that \$400 million would be allocated to bridge reconstruction and replacement.

That is the reason they have a 30-percent limit on that feature in the administration bill. There are other aspects of the administration bill relating to the permission to transfer moneys, relating to the restriction on types of categories which can be addressed, which suggest to me the possibility that before we are through, if the administration approach is adopted, the distinct possibility exists that the level of highway safety activity which was set in the 1973 act at \$475 million a year will be at least cut in half and maybe more than that.

Mr. DELIBERT. Senator, as you know, each of these sections of the law requires the states to submit an annual report on their progress in the safety improvement programs.

We went back during the past year and reviewed the reports that the States submitted last summer. I think, if you look at them, you would come to the conclusion that we did, that most of the States are really not in any position yet to set intelligent priorities between the various programs. I mean this in terms of the kinds of recordkeeping systems they have, the kinds of inventories they have, how they evaluate that data and lack of before evaluations for before-and-after studies.

I think that this consolidation of programs may be right some years down the road. But I think the States are in no position now to operate under that type of arrangement. I think the programs should be kept separate.

Senator BENTSEN. May I interrupt? I would like to ask Dr. Gregory to comment on the position of the States and what progress they have made concerning highway safety and your strong feelings about the limiting the number of categories.

Do you think that States are in a position to establish the proper priorities in safety?

Dr. GREGORY. Mr. Chairman, of course my view is not one of the Federal Highway Administration. I really can't comment on the readiness of the State to establish priorities in the highway safety construction area.

I will say this, though: that my experience with the growth and the improvement in the sophistication of the highway safety people dealing with NHTSA gives me confidence that if we work together as we have over the past 2 years, we will establish a management program which does identify important areas for highway safety improvement and that we will continue to improve this program.

I am confident that many of the States will be able to develop a problem-oriented highway safety program. In fact at least 9 or 10 States are doing so now. They are coming in with programs which instead of saying they are going to implement this standard or that standard, actually say here are our problems.

I will pose this hypothetical so as not to identify a particular State. We may get a submission from a mountain State that identifies that 70 percent of it is problems are on mountain roads. This may have something to do with highway construction or highway safety construction. It may have to do with enforcement and it may have to do with the traffic rules of the road. 20 percent of the difficulty, let's say, are in rural areas and the balance in urban areas. If that State comes to us and says here are our problems, we plan to correct a high

majority of the mountain road problem, the rural road problem, and the urban problem in this order in the next five to eight years, then with this emphasis, this is the kind of a program I could identify for approval, irrespective of specific highway safety standard implementation. It is going to be very difficult for any State with that sort of program not to be addressing the essential highway safety problems. It is this kind of flexibility along with good management of the program, that will impact this problem of highway safety at the earliest possible date.

I have a lot of confidence in the ability of the leaders of the States and the State highway safety representatives, many of whom report directly to their Governors, to achieve a good bit of improvement.

Some States are not in as good a shape as others. I think the leadership of the States that have this added sophistication will ultimately lead to a better national program. I plead for the flexibility that is proposed in the administration's plan.

Senator DOMENICI. Let me ask one very specific question and get back to this business of property inventorying if we did go for a consolidation and I understand your concern about reporting any actual inventory.

In this area and I assume in other major metropolitan areas, when you have an accident on the road, it is one of the most incredible situations to be in 1975 and still find we are trying to get an ambulance or one of these trucks with a hook on the end to move the car over and we wait an hour while traffic is lined up 12 miles back because we can't get an ambulance through the traffic sometimes and you certainly can't get the garage equipment through to move the vehicles.

Is there anyone experimenting with some new technology to get this done? It probably relates to reporting. They don't want to move the vehicles too quick. I read an article suggesting that we might use some air kind of mobility, a big helicopter to move them off.

I don't think that is as crazy as one would think. But what new is being done to expedite the moving off of the highway without encroaching on statistical gathering information, if anything, so we don't have an hour where it really ought to take 10 minutes to get the damaged cars off the road? Yes.

Mr. FISHER. Mr. Chairman, on that subject in my State, at least in the metropolitan area, if a vehicle is not damaged to the extent that it can't be moved under its own power, there is a law now requiring that it be moved to what we call an investigatory site; that is the next exit, get it off the road and then the police come and collect the statistical information.

The problem you are referring to is couched in the idea of property rights; that is, if you have a \$200 fender bender, holding up 20,000 people and wasting \$1 million to protect the \$200 property right that may be settled in a tort court later is unreasonable.

We are at least trying to experiment in this effort. Quite frankly, the people are not yet responding to the law. But at least we have had media coverage and I am not prepared to say whether enforcement of the law will work or not; at least we are encouraging the people to move.

Senator DOMENICI. Let me ask Dr. Gregory and Governor Tiemann to comment on this. Then I will have no further questions.

Isn't there some way we could use modern technology as just a demonstration project to prove that we can even protect these property rights and the life without this approach? I am thinking that we have tremendous aerial photography capacity. Why can't somebody go over the top and take one of the finest pictures ever and it will have every skid mark and the location of everything and we will be done with it and then use whatever way you need to get the vehicles out of there?

Dr. GREGORY. Some States have been experimenting to some degree with this, Senator, I do not recall specific details of the types of projects that we in NHTSA have funded. However, with this kind of an approach, where you can take photographs from every angle, followed by, let's say, a helicopter which physically removes the cars to the side of the road; if that is possible, there is some question whether all of this would be admissible in court. In addition, on some of these freeways, it is impossible to remove the car in this manner. We are getting reports of individual attempts to do this. Strangely enough, one of the comments that has come up recently is that the approach and operation of a helicopter seems to divert the attention of many people from their duties as drivers, and some accidents have actually resulted.

That is just one of the problems as I recall. I agree that often a \$50 or a \$100 accident can tie up literally hundreds of thousands of dollars of productive time on the freeways.

Frankly, I have no quick remedy for that.

Senator DOMENICI. I would also suggest to you that there are plenty of accidents occurring because of the backup and plenty of the hangups are not accidents at all. The car is broken down in one of these positions where you can't get it off the road.

They are in total frustration waiting for somebody to push them and there are 8 miles of cars and probably five accidents occurring in this stream of traffic.

Dr. GREGORY. I still don't have a quick solution. I agree with you that these kinds of things should be experimented with and indeed have been.

I think, though, if I may comment on what you said, one of the reasons for automobile breakdowns is that many times these vehicles are not properly inspected. As a result, they breakdown often on the highways.

Therefore, as you can understand when we are trying to assess the benefit-cost analysis of vehicle inspection, it is impossible for us to put a dollar figure on the inconvenience and lack of productivity that results when someone has a car that has not been inspected properly and properly maintained.

I thank you for bringing that up because it gave me the opportunity to talk about the importance of vehicle inspection from another angle.

Senator DOMENICI. Let me ask you one last question. This is both to you, Dr. Gregory and to you, Governor Tiemann.

Is there anything in the law right now that would permit someone to apply for a major grant to try this on an experimental basis in all its phases in one of the major metropolitan areas?

It is major because it is involved in the admissibility in court later and all of the other things.

Dr. GREGORY. We have opportunities in NHTSA under our 403 demonstration programs.

Mr. TIEMANN. This is exactly right. I will make a quick comment because I know you have to go vote, but the problem we have not addressed on this matter of a fender or fender bender is the insurance liability.

We are very reluctant to initiate a program of getting a Huey helicopter to reach down and snatch up the car and take it away. The problem there is everybody rear ends everybody else watching the helicopter fly away. That can be overcome. What I am saying is that the insurance companies are having a real problem on liability.

I think the Center for Auto Safety, having been underwritten by an insurance company, maybe they would have more money for one of these grants.

Senator BENTSEN. A statement from Hon. George Busbee, Governor of the State of Georgia, will be included in the record at this point.

[Governor Busbee's statement, statements from the American Road Builders Association, FIBCo, Inc., and Mr. Gilbert Carmichael follow:]

STATEMENT OF
THE HONORABLE GEORGE D. BUSBEE
GOVERNOR OF GEORGIA
BEFORE THE
PUBLIC WORKS COMMITTEE,
SUBCOMMITTEE ON TRANSPORTATION

U. S. SENATE

JULY 28, 1975

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, I APPEAR
BEFORE YOU TODAY AS THE GOVERNOR OF THE PEOPLE OF
GEORGIA. I AM ALSO CONVEYING THE VIEWS OF THE NATIONAL
GOVERNORS' CONFERENCE AS A MEMBER OF ITS TRANSPORTATION
COMMITTEE. WITH ME TODAY IS MR. THOMAS D. MORELAND,
COMMISSIONER OF THE DEPARTMENT OF TRANSPORTATION OF
GEORGIA.

2.

AS GOVERNOR, I HAVE BECOME AWARE OF SEVERAL TRANSPORTATION ISSUES GROWING OUT OF OUR STATE/FEDERAL PARTNERSHIP WHICH NEED TO BE DISCUSSED. I FIND IT DIFFICULT TO ADDRESS JUST ONE MODE OF TRANSPORTATION, AS ALL TRANSPORTATION MODES IN OUR STATE ARE OF CONCERN TO ME DUE TO INSUFFICIENT FUNDING. HOWEVER, I WILL LIMIT MOST OF MY REMARKS THIS MORNING TO THE HIGHWAY AREA BECAUSE THE STATE OF GEORGIA IS FACING A SERIOUS CRISIS IN HIGHWAY FUNDING.

OVER THE LAST 18 MONTHS WE HAVE SEEN OUR GAS TAX REVENUES DECLINE WHILE OUR TRAVEL VOLUMES HAVE INCREASED. THIS HAS BEEN BROUGHT ABOUT BECAUSE OF THE EFFECT OF THE ENERGY SITUATION--THE INCREASED COST OF ENERGY AND THE INCREASED EFFICIENCY OF THE VEHICLES OPERATING ON OUR HIGHWAY SYSTEM.

FOR FISCAL YEARS 1974 AND 1975 WE HAVE SEEN A DECLINE OF ALMOST \$60 MILLION IN MOTOR FUEL TAXES FROM OUR EXPECTED LEVELS. BOND SALES HAVE ALSO SUSPENDED AND THIS HAS RESULTED IN A TOTAL SHORTFALL OF ALMOST \$90 MILLION OVER THE LAST TWO YEARS.

3.

INDEED, WHEN WE LOOK AT THE NEXT FOUR YEARS, WE EXPECT OUR TRANSPORTATION REVENUES TO FALL OVER \$400 MILLION SHORT OF THOSE REVENUES ANTICIPATED, PLANNED FOR, AND PROGRAMMED FOR. WHEN WE CONSIDER THE MASSIVE IMPACT OF INFLATION UPON THE MAINTENANCE AND CONSTRUCTION ACTIVITIES OF OUR DEPARTMENT OF TRANSPORTATION, THE PROBLEM BECOMES CRITICAL. IN 1975 WE WILL ONLY BE ABLE TO HAVE A CONSTRUCTION PROGRAM IN REAL DOLLARS EQUAL TO THE LEVEL OF 1972. IN REAL DOLLARS OUR MAINTENANCE PROGRAM IN 1975 WILL BE AT THE LOWEST LEVEL SINCE 1967 DESPITE THE INCREASED USAGE OF OUR HIGHWAY SYSTEM BY TRUCKS AND CARS. IN FACT, WE ARE PRESENTLY ESTIMATING THAT FOR FISCAL YEAR 1978, IF THERE ARE NO CHANGES IN THE PRESENT FUNDING LEVELS, WE WILL HAVE TO REDUCE OUR MAINTENANCE PROGRAM TO LESS THAN 1/2 OF THE 1971 LEVEL.

UP UNTIL RECENT TIMES GEORGIA HAS BEEN ABLE TO FUND THE MAINTENANCE OF ITS HIGHWAY SYSTEM FROM ITS MOTOR FUEL TAX REVENUE. HOWEVER, WITH THE ENERGY CRISIS AND THE REDUCTIONS IN GAS TAX REVENUE, I'VE BEEN TALKING

4.

ABOUT, IT HAS BECOME IMPOSSIBLE TO CONTINUE AS IN THE PAST AND THE TRANSFER OF GENERAL FUND MONEY TO HIGHWAY MAINTENANCE HAS BEEN NECESSARY. THE ENERGY CRISIS HAS CAUSED MAJOR CHANGES IN THE ECONOMY AND IT HAS BECOME EVIDENT THAT THIS IS NOT A SHORT-RANGE SITUATION. THE STATES NEED RELIEF BECAUSE OF THESE UNFORESEEN ECONOMIC FORCES IN ORDER TO CONTINUE THEIR TRANSPORTATION PROGRAMS.

OTHER STATES ARE HAVING SIMILAR PROBLEMS WITH MOTOR FUEL REVENUE LEVELS AS GASOLINE USAGE HAS DECREASED. NO FEWER THAN 27 STATES ARE CONSIDERING MOTOR FUEL TAX INCREASES TO COUNTER THEIR FALLING REVENUES.

FLORIDA HAS CONDUCTED RESEARCH INTO THE IMPACT OF THE ENERGY PROBLEM UPON THEIR REVENUES. THEIR STUDIES INDICATE THAT WITH THE PRICE INCREASES NECESSARY TO ACHIEVE THE "ENERGY INDEPENDENCE" GOALS IT WILL BE 1978 OR 1979 BEFORE THEIR REVENUE WILL RETURN TO ITS 1973 LEVEL.

5.

FUNDING DIFFICULTIES DO NOT EXIST JUST IN OUR HIGHWAY PROGRAM. WE ARE HAVING MAJOR PROBLEMS WITH OUR PUBLIC TRANSPORTATION PROGRAMS. THE ENERGY CRISIS HAS CAUSED US TO RECOGNIZE MANY OF THE NEEDS IN PUBLIC TRANSPORTATION AND WE ARE SEEKING TO FULFILL OUR RESPONSIBILITY IN THESE AREAS. WE ESTIMATE THAT 20 PER CENT OF OUR RURAL POPULATION IS TRANSPORTATION DEFICIENT. TO PROVIDE 25 PER CENT OF THE SERVICES NEEDED BY THE RURAL ELDERLY, POOR AND HANDICAPPED WILL COST \$6 TO \$7 MILLION A YEAR. IN OUR URBAN AREAS WE PRESENTLY HAVE SEVEN PUBLIC TRANSPORTATION SYSTEMS THAT ARE EITHER ESTABLISHED OR BEING DEVELOPED. THESE CITIES NEED A TOTAL OF ABOUT \$6.2 MILLION THIS YEAR TO MAINTAIN THE OPERATION OF THESE SYSTEMS. THE 1974 URBAN MASS TRANSIT ACT WILL PROVIDE \$4.1 MILLION FOR OPERATING AND CAPITAL COST TO THESE CITIES.

IN THE METROPOLITAN ATLANTA AREA, WE ARE SEEKING TO DEVELOP A 53-MILE RAIL TRANSIT SYSTEM AT AN ESTIMATED COST OF \$2.1 BILLION TO SERVE THE NEEDS OF OUR MAJOR URBAN AREA. AT THE PRESENT TIME WE HAVE LESS THAN \$1.2

6.

BILLION TO FUND THIS RAIL SYSTEM--REDUCING IT TO LESS THAN 14 MILES. GEORGIA HAS PUBLIC TRANSPORTATION NEEDS THAT TOTAL ABOUT \$2.2 BILLION OVER THE NEXT TEN YEARS WITH LESS THAN \$1.3 BILLION AVAILABLE FROM STATE, LOCAL AND FEDERAL FUNDS.

OVER THE NEXT 20 YEARS GEORGIA WILL NEED TO DEVELOP TWO NEW AIR CARRIER AIRPORTS. IN ADDITION, WE WILL NEED TO DEVELOP AN ESTIMATED 10 TO 20 NEW GENERAL AVIATION AIRPORTS. ALL OF THIS WILL COST AN ESTIMATED \$1.1 BILLION. THE AVERAGE FUNDING WE HAVE RECEIVED FOR AIRPORTS INCLUDING OUR FEDERAL, STATE AND LOCAL SHARES HAS BEEN APPROXIMATELY \$10 MILLION A YEAR OVER THE LAST THREE YEARS. UNLESS THIS FUNDING LEVEL IS CHANGED, WE WILL FALL ABOUT \$800 MILLION SHORT OF MEETING OUR AVIATION NEEDS.

OVER THE NEXT TEN YEARS THE STATE OF GEORGIA NEEDS TO INVEST APPROXIMATELY \$95 MILLION IN ITS PORTS, HARBORS AND TERMINALS TO PROVIDE THE NEEDED MARINE TRANSPORTATION SERVICE. PRESENTLY THE ONLY SOURCE FOR THESE FUNDS IS

7.

OUR GENERAL REVENUE WHICH HAS BEEN SO SORELY TAXED THAT I HAD TO CALL A SPECIAL SESSION OF THE LEGISLATURE TO REDUCE THE BUDGET LEVELS THIS YEAR.

THESE TRANSPORTATION NEEDS ARE NOT UNIQUE TO GEORGIA. THE 1974 NATIONAL TRANSPORTATION REPORT ESTIMATED THAT OVER \$40 BILLION WAS NEEDED TO MAINTAIN EXISTING SERVICE LEVELS ON THE RURAL ARTERIAL SYSTEM UP TO 1990. COMPLETION OF THE INTERSTATE SYSTEM BY 1990 WOULD REQUIRE \$72 BILLION AT AN ANNUAL RATE OF \$4.8 BILLION ACCORDING TO THE HIGHWAY USERS FEDERATION. HOWEVER, IF COMPLETION WAS ACCELERATED SO THAT ALL SECTIONS WERE OPEN BY 1985, THE COST WOULD ONLY BE \$56 BILLION AT A \$5.6 BILLION PER YEAR FUNDING LEVEL--A SAVING OF ABOUT \$16 BILLION BECAUSE INFLATION COSTS ARE REDUCED.

THE JOINT IMPACT OF INFLATION, IMPOUNDMENTS AND REDUCED APPORTIONMENTS HAS BEEN THE MAJOR REASON FOR EXTENDING THE OPENING DATE OF THE LAST INTERSTATE SECTION. IN FACT, IN EVERY YEAR SINCE 1962 THE COST TO COMPLETE THE REMAINING SECTIONS HAS PUSHED THE TOTAL COST EVEN HIGHER. COMPLETION IN 1985 WILL--IF PRESENT APPORTIONMENT LEVELS ARE MAINTAINED AND NO IMPOUNDMENT OCCURS--BE 235 PER CENT OF THE 1956 COST ESTIMATE.

8.

THE 1974 NATIONAL TRANSPORTATION REPORT ALSO SUMMARIZED COSTS FOR AIRPORTS AND MARINE FACILITIES FROM 1972 TO 1990. ACCORDING TO THE STATES' ESTIMATES OVER \$24 BILLION WILL BE NEEDED NATIONALLY FOR AIRPORT CAPITAL COSTS. THE STUDY REPORTED A NEED FOR \$4.6 BILLION IN CAPITAL INVESTMENTS IN MARINE TERMINALS, WATERWAYS AND HARBORS THROUGH THE YEAR 1990. THE TOTAL TRANSPORTATION NEEDS OF THE NATION BETWEEN 1972 AND 1990 AMOUNT TO OVER \$531 BILLION IN 1971 DOLLARS.

WE DO NOT FEEL THAT IT IS POSSIBLE TO OBTAIN ADDITIONAL FUNDING FOR PUBLIC TRANSPORTATION OR ANY OTHER MODE FROM THE HIGHWAY TRUST FUND. IN GEORGIA WE WILL NEED APPROXIMATELY \$4.7 BILLION OVER THE NEXT TEN YEARS TO COMPLETE OUR INTERSTATE SYSTEM AND MAINTAIN THE EXISTING SERVICE LEVEL ON OUR OTHER HIGHWAYS. THIS PROGRAM PROVIDES FOR VIRTUALLY NO NEW ROUTES EXCEPT FOR THOSE INTERSTATE SEGMENTS WHICH WILL BE COMPLETED. OVER THE LAST YEAR THE STATE OF GEORGIA HAS ADDED LESS THAN 100 MILES TO ITS 18,300-MILE STATE HIGHWAY SYSTEM AND ALMOST ALL OF THIS WAS INTERSTATE MILEAGE. AT THE PRESENT TIME, WE ARE EXPECTING LESS

9.

THAN \$3.5 BILLION TO PROVIDE FOR THESE HIGHWAY NEEDS RESULTING IN A \$1.2 BILLION SHORTFALL AND THIS DOES NOT INCLUDE ANY EFFECTS OF THE ENERGY SITUATION AS IT HAS DEVELOPED OVER THE LAST 18 MONTHS.

IN ORDER TO CLOSE THE GAPS IN THE INTERSTATE SYSTEM IN GEORGIA WE HAVE DEVELOPED A PRE-FINANCING PROGRAM. THE INTEREST FOR THE BONDS IS BEING PAID FOR BY THE PEOPLE OF THE STATE OF GEORGIA FROM THE GENERAL FUND BECAUSE ADEQUATE FUNDING LEVELS WERE NOT AVAILABLE FROM THE FEDERAL GOVERNMENT TO COMPLETE THE INTERSTATE IN GEORGIA BEFORE THE 1990'S. WE FELT THAT THREE OF THESE MAJOR INTERSTATE ROUTES WERE OF SUCH IMPORTANCE TO THE STATE AND THE NATION THAT THEIR COMPLETION SHOULD BE SPEEDED UP; AND, SINCE FEDERAL FUNDS WERE INSUFFICIENT, STATE FUNDED BONDS HAVE BEEN SOLD FOR THIS PURPOSE.

ONE OF THESE ROUTES, INTERSTATE 16, SERVES SAVANNAH WHICH IS A MAJOR PORT FOR THE SOUTHEAST AND THE CENTRAL MIDWEST. THE PRIMARY HIGHWAY BEING USED IN LIEU OF THE UNCOMPLETED PORTION OF I-75 NORTH OF ATLANTA HAS ONE OF THE POOREST SAFETY RECORDS IN THE STATE, THEREFORE, IT WAS FELT THAT THE COMPLETION OF THAT SECTION WILL PROVIDE SIGNIFICANT SAFETY BENEFITS

10.

TO ALL OF THOSE WHO TRAVEL THROUGH OUR STATE, INTERSTATE 185 LINKS OUR SECOND LARGEST CITY, COLUMBUS, AND A MAJOR MILITARY BASE--FORT BENNING--INTO THE INTERSTATE SYSTEM. WE FELT THAT THIS WAS OF SUFFICIENT IMPORTANCE THAT ITS COMPLETION SHOULD BE EXPEDITED.

IN TOTAL, GEORGIA WILL SELL \$180 MILLION IN BONDS OVER THE NEXT TWO YEARS TO PRE-FINANCE THESE IMPORTANT ROUTES. IT IS SIGNIFICANT THAT THE GENERAL ASSEMBLY IN ITS RECENT SPECIAL SESSION REDUCED STATE SPENDING BY \$124 MILLION BUT FELT THE INTERSTATE COMPLETION PROGRAM OF SUCH IMPORTANCE TO THE STATE THAT IT WAS LEFT INTACT.

IN ORDER TO DEAL WITH THE TRANSPORTATION CRISIS THAT I HAVE BEEN TALKING ABOUT, IT WILL BE NECESSARY TO DEVELOP A NATIONAL TRANSPORTATION POLICY REFLECTING NATIONAL PRIORITIES FOR ALL MODES OF TRANSPORTATION--HIGHWAYS, RAILS, AIRPORTS, AND WATERWAYS. THOSE INVOLVED IN TRANSPORTATION DEVELOPMENT CAN THEN ADDRESS THE ESTABLISHED GOALS SUCH AS ENERGY CONSERVATION AND PUBLIC TRANSPORTATION, AND INSURE THAT THE RESULTING TRANSPORTATION SERVICE IS PART OF A BALANCED AND INTEGRATED TRANSPORTATION SYSTEM.

11.

THE NATION HAS ENTERED A TIME OF GREAT CHANGE. I NOTED EARLIER THE IMPACT OF THE ENERGY CRISIS ON OUR MOTOR FUEL REVENUES; IN FACT, ALL OF OUR OTHER REVENUES ARE ALSO BEING IMPACTED BY THIS MAJOR STRUCTURAL SHIFT IN OUR ECONOMY. IT IS AN APPROPRIATE TIME TO REASSESS OUR NEEDS AND OUR METHODS, ESPECIALLY IN LIGHT OF THE NATIONAL ENERGY GOALS BEING ESTABLISHED. WE MUST LOOK AT NEW APPROACHES TO TRANSPORTATION, TO TRANSPORTATION FUNDING, AND OTHER MEANS OF PROVIDING GOVERNMENTAL SERVICES. THE PEOPLE OF THE NATION MUST HAVE THE FREEDOM OF MOBILITY FOR IT IS AN IMPORTANT FACTOR IN OUR ECONOMY AND IN THE STRUCTURE OF OUR SOCIETY. HOWEVER, WE SHOULD VERY CAREFULLY EVALUATE THE SYSTEMS IMPACTS OF ANY CHANGES WE MAKE IN THE TRANSPORTATION AREA. IT IS FOR THIS REASON THAT I URGE YOU TO CONSIDER THE FORMULATION OF AN EXPLICIT NATIONAL TRANSPORTATION POLICY TO GUIDE US THROUGH THIS PERIOD OF CHANGE.

YOU HAVE BEFORE YOU SEVERAL PROPOSALS ON RESTRUCTURING THE HIGHWAY PROGRAM OF THE NATION. WE URGE YOU TO MOVE CAREFULLY BUT EXPEDITIOUSLY. WE HAVE CONSIDERED THESE PROPOSALS FROM OUR STATE'S POINT OF VIEW AND WOULD LIKE

12.

TO OFFER SOME SUGGESTIONS CONCERNING WHAT WE FEEL IS AN APPROPRIATE HIGHWAY PROGRAM FOR THE NATION.

THE INTERSTATE HIGHWAY SYSTEM IS NOW THE NATIONAL SYSTEM OF ROADS THAT PROVIDES INTERCITY TRAVEL BETWEEN ALL MAJOR POINTS IN OUR NATION. INDEED, OVER 90 PER CENT OF ALL CITIES 50,000 AND ABOVE ARE CONNECTED BY THIS INTERSTATE SYSTEM. WE FEEL THAT THE HIGHWAY TRUST FUND SHOULD BE EXTENDED INDEFINITELY TO PROVIDE APPROPRIATE FUNDING FOR THE COMPLETION, RECONSTRUCTION AND MAINTENANCE OF THIS GREAT SYSTEM.

MANY OF THE EARLY SEGMENTS OF THE INTERSTATE ARE NOW NEEDING MAJOR RECONSTRUCTION AND REPAIRS. IF WE DO NOT MAINTAIN THE PAVEMENTS AND STRUCTURES ALONG THE INTERSTATE SYSTEM AND PROVIDE FOR THE INCREASING USE MUCH OF OUR INVESTMENT WILL BE LOST. INDEED, MANY SEGMENTS OF OUR INTERSTATE SYSTEM WILL NEED SUCH EXTENSIVE MAINTENANCE IN THE NEAR FUTURE THAT THEIR ORIGINAL CONSTRUCTION COSTS WILL BE EXCEEDED.

13.

A LEVEL OF FUNDING SHOULD BE ESTABLISHED WHICH IS SUFFICIENT TO COMPLETE THE INTERSTATE SYSTEM THROUGHOUT THE NATION BY THE EARLY 1980's. INCLUDED IN THIS SHOULD BE SUFFICIENT FUNDS FOR THE RECONSTRUCTION AND MAINTENANCE OF APPROPRIATE PORTIONS OF THE SYSTEM DURING THIS TIME.

WITH THE COMPLETION OF THE INTERSTATE SYSTEM AND THE MATURING OF OUR HIGHWAY TRANSPORTATION NETWORK ACROSS THE NATION, IT IS TIME TO MOVE BEYOND THE OLD A B C SYSTEMS AND RECOGNIZE THE INCREASING CONCERN FOR PRIMARY AND SECONDARY HIGHWAYS AT THE STATE LEVEL. WE SUGGEST THAT THE REMAINING TWO OR THREE CENTS OF THE PRESENT GAS TAX BE RETURNED TO THE STATES THROUGH THE TAX PREEMPTION PROCESS FOR DEVELOPING, MAINTAINING AND OPERATING THE OTHER HIGHWAY SYSTEMS. THE STATES ARE QUITE EXPERIENCED IN DEVELOPING PLANS AND PROGRAMS FOR THE CONSTRUCTION AND MAINTENANCE OF THEIR HIGHWAY SYSTEMS. WITH FEDERAL POLICIES AND GUIDELINES, IT IS POSSIBLE FOR THE STATES TO PROVIDE THESE SYSTEMS TO SERVE ALL TRAVELERS. CERTIFICATION ACCEPTANCE HAS SHOWN THAT

WITH APPROPRIATELY ESTABLISHED GUIDELINES AND PROCEDURES THE STATES CAN PROVIDE FOR THE DESIGN AND CONSTRUCTION OF HIGHWAYS.

GENERAL FUNDS SHOULD BE APPROPRIATED TO PROVIDE REVENUE FOR MATTERS OF NATIONAL INTEREST SUCH AS SAFETY, BRIDGE RECONSTRUCTION, ENERGY EFFICIENT TRANSPORTATION PROJECTS OR ANY OTHER AREA WHERE THE CONGRESS FEELS THAT THERE IS A PARTICULAR NATIONAL INTEREST AT STAKE. BENEFITS FROM THESE TYPES OF SPECIAL PROGRAMS ACCRUE TO OTHERS BEYOND THE HIGHWAY USER OR REPRESENT A MAJOR CAPITAL INVESTMENT AND IT WOULD BE APPROPRIATE TO USE GENERAL FUNDS FOR THIS PURPOSE.

WE DO NOT FEEL THAT ANY OF THE USER-GENERATED REVENUES PRESENTLY GOING INTO THE HIGHWAY TRUST FUND SHOULD BE PLACED IN THE GENERAL FUND, AS THERE IS PRESENTLY INSUFFICIENT REVENUE FOR THE COMPLETION OF THE INTERSTATE SYSTEM AND FOR THE GROWING PROBLEMS OF MAINTENANCE AND RECONSTRUCTION. THE PROBLEMS OF MAINTAINING OUR OTHER HIGHWAY SYSTEMS CAN BE MORE

15.

APPROPRIATELY ADDRESSED AT THE STATE LEVEL WHERE THE INDIVIDUAL PRIORITIES CAN BE BETTER ASSESSED. THE DIVERSION OF MOTOR FUEL TAXES TO THE GENERAL FUND WOULD MAKE IT VIRTUALLY IMPOSSIBLE FOR THE STATES TO PLAN AND PROGRAM IN A TIMELY MANNER FOR HIGHWAY MAINTENANCE AND RECONSTRUCTION.

RESTRUCTURING THE HIGHWAY PROGRAM IN THE MANNER WE HAVE JUST OUTLINED ACCOMPLISHES SEVERAL THINGS:

1. IT PROVIDES FOR THE COMPLETION AND CONTINUAL MAINTENANCE OF OUR NATIONAL SYSTEM OF INTERSTATE HIGHWAYS. AS THERE WILL PROBABLY NOT BE ANOTHER SUCH SYSTEM OF HIGHWAYS DEVELOPED, WE FEEL THAT IT IS APPROPRIATE NOW TO ESTABLISH A PERMANENT MECHANISM FOR THE CARE OF THE EXISTING OR SOON-TO-BE COMPLETED ROADS.
2. IT REDUCES THE COMPLEXITY OF THE 37 CATEGORIES THAT HAVE EVOLVED IN THE PRESENT HIGHWAY PROGRAM AND MAKES IT MUCH EASIER FOR THE STATES' TO PROGRAM FUNDS ACCORDING TO THEIR NEEDS.

3. IT PROVIDES THE STATES WITH A FUNDING BASE TO MAINTAIN THE SERVICE LEVELS OF THEIR EXISTING HIGHWAY SYSTEMS. THE STATE HIGHWAY DEPARTMENTS OR DEPARTMENTS OF TRANSPORTATION CAN PROVIDE THIS MAINTENANCE ACTIVITY MUCH BETTER THAN AT THE FEDERAL LEVEL BECAUSE THEY ARE CLOSER TO THE PROBLEMS.

4. IT PROVIDES FUNDS FOR AREAS OF SPECIAL NATIONAL INTEREST SUCH AS THE DEVELOPMENT OF ENERGY EFFICIENT TRANSPORTATION SOLUTIONS, HIGHWAY SAFETY IMPROVEMENTS, OR OTHER SUCH PROGRAMS.

AS THE GOVERNOR OF THE STATE OF GEORGIA, I FEEL THAT THE PROGRAM WE PROPOSE IS THE MOST LOGICAL AND WORKABLE FEDERAL SOLUTION TO THE CRISIS WE ARE EXPERIENCING TODAY IN HIGHWAY FUNDING. ALL STATES WILL HAVE TO ADDRESS THEIR OWN REVENUE NEEDS BUT CAN ONLY DO SO AFTER A FEDERAL DIRECTION IS ESTABLISHED. WE RECOGNIZE THAT IN MANY ASPECTS THIS IS A CONSIDERABLE DEPARTURE FROM THE WAYS WE HAVE HISTORICALLY HANDLED OUR HIGHWAY PROGRAMS. HOWEVER, WE FEEL THAT WITH THE MAJOR CHANGES OCCURRING IN OUR

17.

NATION TODAY IT IS TIME TO LOOK AT OUR TRANSPORTATION SYSTEMS AND TO DEVELOP METHODS WHICH ARE APPROPRIATE FOR PROVIDING TRANSPORTATION SERVICES TO OUR PEOPLE THROUGH THE REMAINDER OF THIS CENTURY.

IN SUMMARY, MY RECOMMENDATIONS FOR A NEW HIGHWAY PROGRAM ARE:

1. CONTINUE THE PRINCIPLE OF MAJOR SUPPORT FOR HIGHWAY CONSTRUCTION AND MAINTENANCE THROUGH ROAD USER REVENUE AT THE FEDERAL AND STATE LEVELS. SPECIFICALLY, EXTEND THE HIGHWAY TRUST FUND INDEFINITELY FOR THE CONSTRUCTION, RECONSTRUCTION AND REHABILITATION OF THE INTERSTATE HIGHWAY SYSTEM--TRULY A NATIONAL HIGHWAY SYSTEM.
2. RETURN PRIMARY RESPONSIBILITY FOR THE OTHER HIGHWAY FACILITIES TO THE STATE LEVEL AND WITH THAT RETURN, ALLOW THE STATES TO PREEMPT THAT PORTION OF THE FEDERAL REVENUE NOT REQUIRED TO SUPPORT THE INTERSTATE SYSTEM.

18.

3. FUND FROM THE GENERAL FUND OTHER HIGHWAY PROGRAMS WHICH FROM TIME TO TIME MAY BE FOUND BY THE CONGRESS TO BE OF NATIONAL INTEREST. A PRESENT EXAMPLE WOULD BE A PROGRAM TO RECONSTRUCT AND TO ENCOURAGE THE STATE AND LOCAL GOVERNMENTS TO RECONSTRUCT BRIDGES WHICH ARE STRUCTURALLY AND FUNCTIONALLY DEFICIENT.

4. CONTRARY TO THE IDEA THAT TOO MUCH REVENUE IS BEING DEVOTED TO HIGHWAYS AT PRESENT, THE REVERSE IS TRUE. ALL STATES ARE PRESSED TO MAINTAIN THE PUBLIC'S INVESTMENT IN THE HIGHWAY SYSTEM AND TO PROVIDE HIGHWAY TRANSPORTATION AT A REASONABLE SERVICE LEVEL. THEREFORE, WE SHOULD PROVIDE FUNDING LEVELS SUFFICIENT TO MAINTAIN OUR HIGHWAY PROGRAM IN ACCORDANCE WITH THE NATIONAL TRANSPORTATION POLICY.

5. IF THE CONGRESS IS NOT WILLING TO RETURN A SIGNIFICANT PORTION OF THE PRESENT FEDERAL GAS TAX REVENUE TO THE STATES, RATHER THAN TO DIVERT

19.

IT TO THE GENERAL FUND, I WOULD RECOMMEND AN EXTENSION OF THE PRESENT PROGRAM INCORPORATING THE FOLLOWING MEASURES:

A. A HIGHER INTERSTATE APPORTIONMENT LEVEL THAN PRESENT. THE NEED FOR CLOSING THE GAPS IN THE INTERSTATE SYSTEM IS EVIDENCED BY THE WILLINGNESS OF OUR STATE TO ADVANCE STATE MONEY FOR THAT PURPOSE DURING A HARD-PRESSED YEAR.

B. REDUCE THE CATEGORIES AND, IN ADDITION, ALLOW STATES MAXIMUM FLEXIBILITY BETWEEN THE REMAINING PROGRAMS. I SUGGEST FOUR CATEGORIES: INTERSTATE, RURAL, URBAN AND SAFETY. IN GEORGIA THE SPLIT BETWEEN RURAL AND URBAN HIGHWAY FUNDS IS INAPPROPRIATE. TOO LITTLE OF THE AVAILABLE FUNDING CAN BE USED IN URBAN AREAS. I SUGGEST A 40 PER CENT TRANSFERABILITY BETWEEN URBAN AND RURAL AND, IN ADDITION, THE ALLOWANCE FOR USE OF RURAL FUNDS IN SMALL URBAN AREAS BETWEEN 5,000 AND 50,000 POPULATION.

FLEXIBILITY SHOULD ALSO BE PROVIDED TO ALLOW USE OF FEDERAL FUNDS OFF THE NON-INTERSTATE, FEDERAL-AID SYSTEM.

C. EXTEND CERTIFICATION ACCEPTANCE TO INCLUDE RIGHT OF WAY, ENVIRONMENTAL, AND EQUAL EMPLOYMENT OPPORTUNITY. OUR EXPERIENCE IN GEORGIA HAS SHOWN CERTIFICATION ACCEPTANCE CAN PROVIDE GREAT BENEFITS IN REDUCING RED TAPE AND THE RESULTING COSTS.

IN CLOSING, PLEASE ALLOW ME TO OBSERVE THAT INDEED WE HAVE PROBLEMS IN SEVERAL MODES OF TRANSPORTATION IN THIS COUNTRY. PREVIOUS TO THE PRESENT TIME, THE MECHANISM FOR MEETING THE NEEDS OF THE HIGHWAY MODE HAS BEEN PERHAPS MORE APPROPRIATE AND MORE EXPEDITIOUSLY USED TO MEET THE NEEDS. HOWEVER, THERE IS SOME DOUBT IN MY MIND THAT THIS IS STILL THE CASE WITH THE LOSSES OCCURRING IN MOTOR FUEL REVENUES FOR HIGHWAYS IN ALL THE STATES.

21.

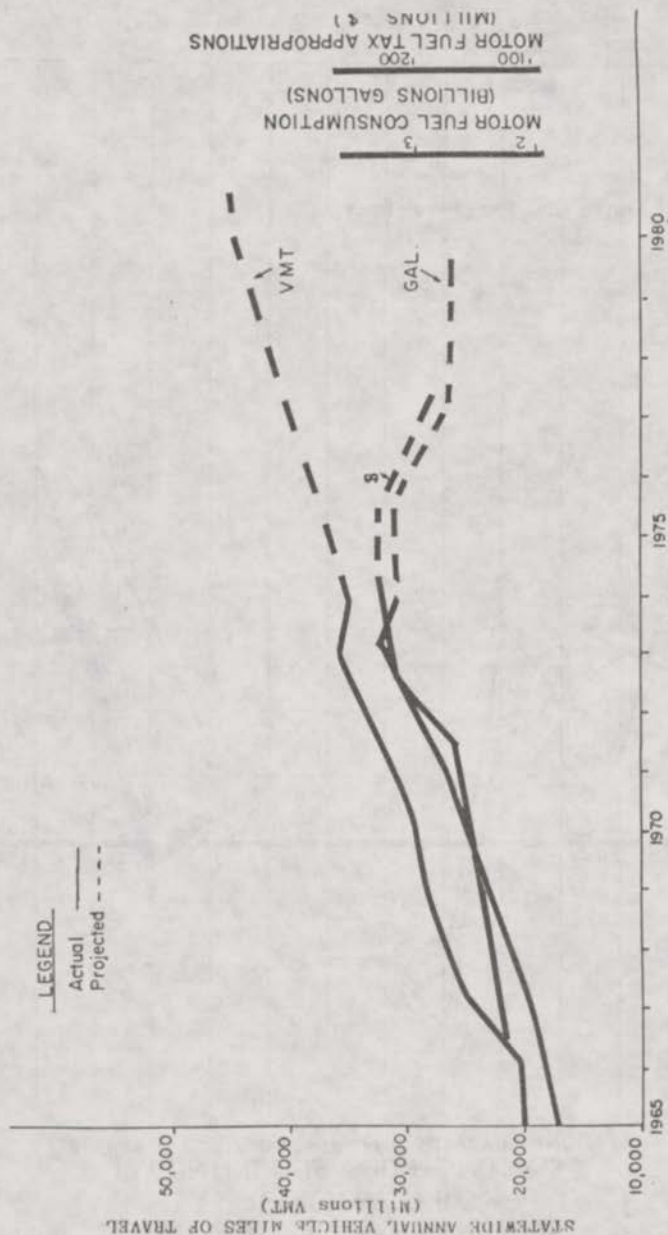
IT SEEMS TO ME THAT A GUIDING PRINCIPLE OF A NATIONAL TRANSPORTATION POLICY SHOULD BE TO BUILD FROM THIS STRENGTH, BRINGING THE OTHER MODES TO THE APPROPRIATE PROGRAM LEVELS AND NOT TO DILUTE THE ONE PROGRAM WHICH IS WORKING WELL.

THANK YOU FOR THIS OPPORTUNITY TO APPEAR BEFORE YOU AND COMMISSIONER MORELAND AND I WOULD NOW BE GLAD TO ANSWER ANY QUESTIONS YOU MIGHT HAVE.

FIG. 4 IV - 3A

GEORGIA

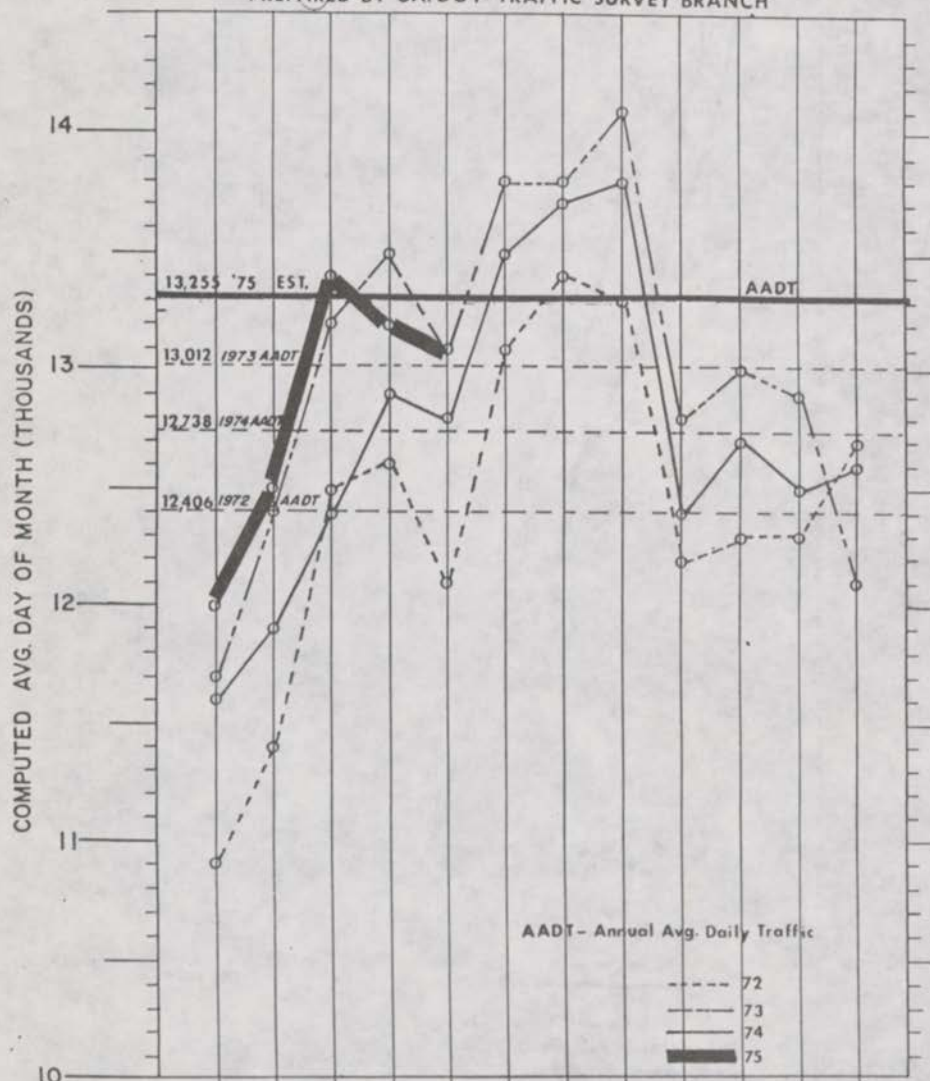
TRAVEL — FUEL USE — FUEL TAX REVENUE



Source GA. D.O.T.

CALENDAR YEAR
IV-3A

GEORGIA TRAFFIC TRENDS
 AS REPRESENTED BY
 46 CONTINUOUS COUNT STATIONS
 PREPARED BY GA. DOT-TRAFFIC SURVEY BRANCH



GA. DEPT. OF TRANSPORTATION
OFFICE OF PLANNING
MOTOR FUEL CONSUMPTION
GROSS GALLONS REPORTED

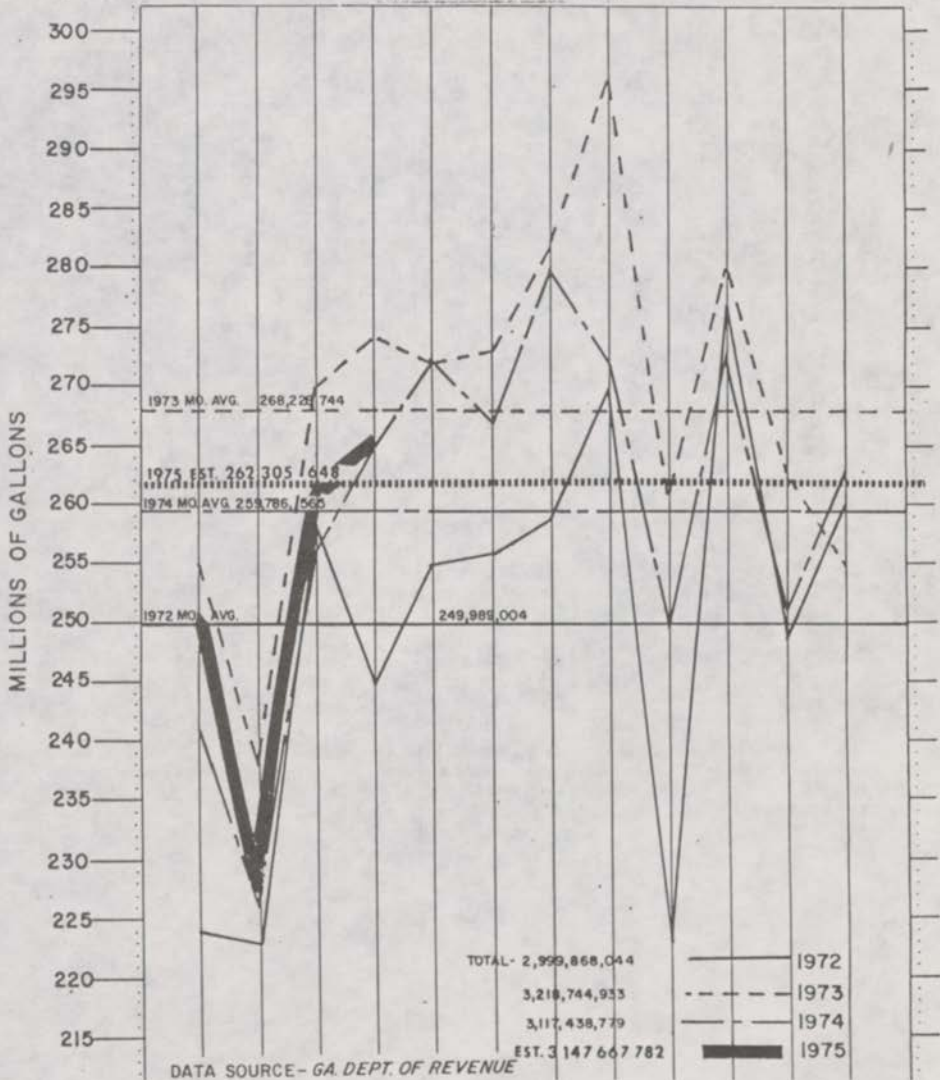


TABLE I

DEPARTMENT OF TRANSPORTATION

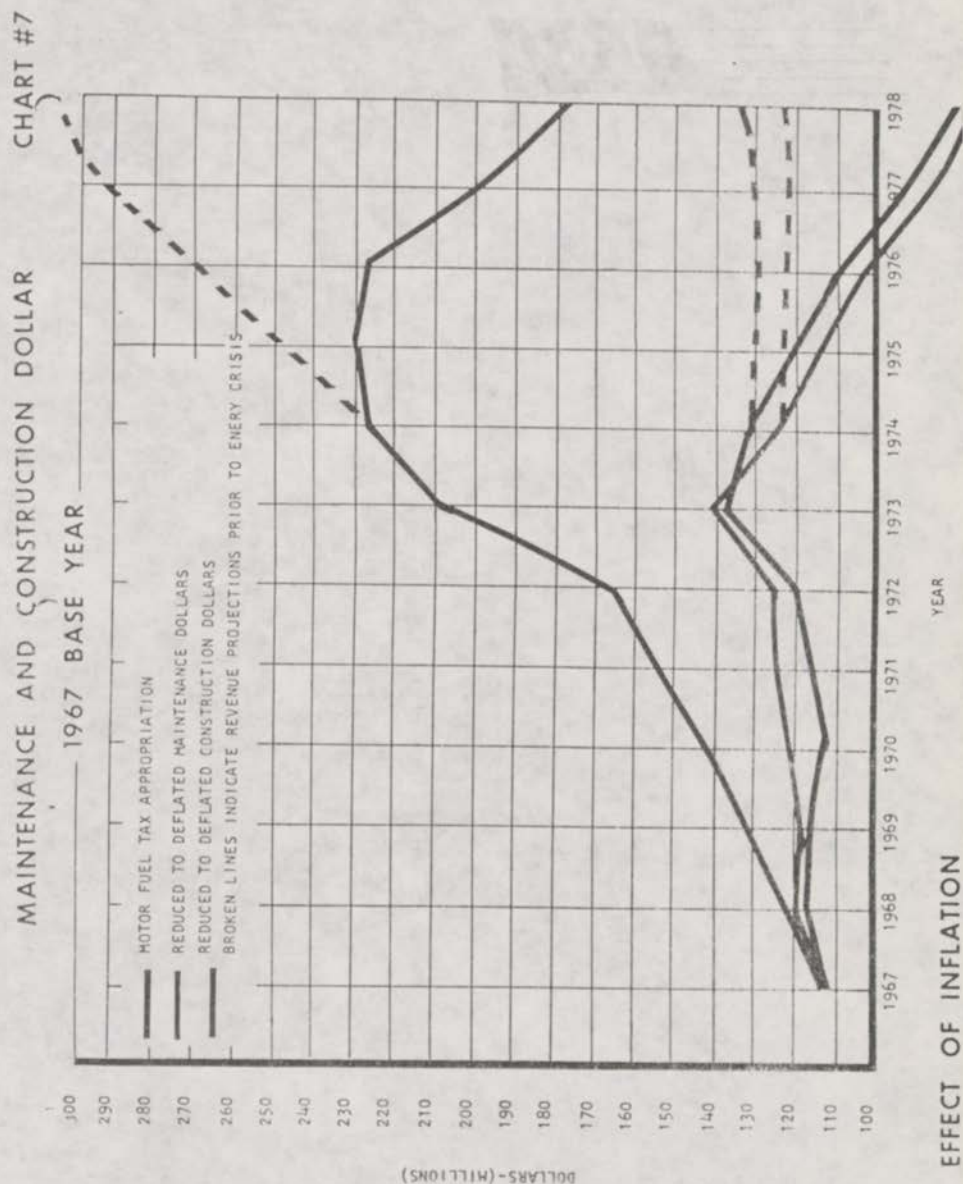
STATE OF GEORGIA

TOTAL EFFECTS OF THE ENERGY CRISIS ON REVENUES*

FOR THE FISCAL YEARS 1975 THROUGH 1978

Fiscal Year	Motor Fuel Tax Shortfall	Bond Program Shortfall	Total Projected Revenue Loss	Accumulated Shortfall
1975	\$ 16,092	-0-	\$ 16,092	\$ 16,092
1976	40,918	32,096	73,014	89,096
1977	92,000	44,000	136,000	225,096
1978	141,000	44,000	185,000	410,096

*In thousands of dollars





1975 Highway Legislative Proposals

Presented by the
American Road Builders' Association
to the
United States Senate
Committee on Public Works
Subcommittee on Transportation

Monday, July 28, 1975

Presented by: James E. Wilson
Former Associate Administrator
for Traffic Safety Programs
National Highway Traffic Safety Administration
Chairman of ARBA's Transportation Safety
Advisory Council

and

President of the Signal Products Division
Amerace Corporation
Niles, Illinois

EXTENSION OF HIGHWAY TRUST FUND

A continuing program of highway improvement is in the national interest and, therefore, an important function of the Federal government. No other capital expenditure program of the Federal government directly affects the lives of so many citizens in so many parts of the United States as the highway program.

No Federal program is more closely intertwined with the operations of State and local government agencies. The continuing highway program requires close coordination, long-range planning, and dependable funding.

Therefore, it seems almost incredible that the Administration would recommend dismantling this most successful of all transportation programs. To reduce the Trust Fund income to support only the Interstate program would be a real disservice to the nation. It is essential that highway safety and unsafe bridge replacement, for example, continue to be funded out of the Federal-Aid Highway Trust Fund.

CONCLUSION: ARBA recommends an indefinite extension of the Highway Trust Fund beyond the current expiration date of October 1, 1977. All current taxes should be extended at their present levels and the highway safety program should be fully funded from the Trust Fund.

HIGHWAY SAFETY

A review of pending legislation indicates an attempt to consolidate or eliminate some of the categorical programs which relate directly to the saving of lives and prevention of injuries on the highway. Authorization levels for those programs that are being continued appear to be adequate.

We are seriously concerned that the Federal-aid safer roads demonstration program which permits the use of federal funds on what are considered off-system roads may be deleted.

W-1

Pending legislation in the House of Representatives includes funding of \$200 Million for construction and reconstruction of off system roads. With the proposal to delete the Federal-aid safer roads demonstration program, it is imperative that the intent of Congress be clearly established that safety projects of all types be permitted within the framework of reconstruction. This extremely beneficial program should be continued in some way.

From my experience in traffic operations and traffic engineering over the years, I have found that for modest expenditures problem areas could be made safer and more efficient. The proposed level of authorizations appear to provide sufficient funds to handle most situations on the Federal-aid highway system. Examples of projects wherein modest expenditures would pay healthy dividends on both on system, and off-system roads are as follows:

1. Delineating and marking blind curves
2. Modest realignment
3. Shoulder widening at selected locations
4. General upgrading of signs
5. Installation of carefully designed lighting
6. Building in super elevation on curves
7. Installing guard rails
8. Utilizing pavement markings to designate narrowing roads and bridges
9. Installing attenuation devices at locations not readily altered otherwise
10. Pavement marking programs of all types

There are many other examples. One can argue that since the bulk of the traffic utilizes the Federal-aid system that the off-system problem is a minor one. I would be quick to point out that approximately 25 percent of the traffic fatalities and injuries occur on off-system roads. These fatalities and injuries can be reduced at modest expenditures by county engineers, city traffic engineers and others who are cognizant of the problem but who do not have the funding to handle it.

A close investigation would reveal that expenditures of \$10,000 to \$25,000 in some rural counties could alleviate anywhere from three to a dozen accident prone locations. If these funds could be passed through quickly on some type of formula, eliminating red tape, the local highway officials could get on with the job of saving lives and preventing injuries.

Let us look at the pavement marking demonstration program. This program was envisioned to mark those roads not already marked, according to the regulations spelled out in the Manual on Uniform Traffic Control Devices. The coverage which is being obtained by this program is especially good.

States are now marking center lines, edge lines and using materials which have a lasting quality, but much more needs to be done. I happen to live in an area that is subjected to considerable snow. The utilization of chemicals, and snowplowing operations which reduces the effectiveness of markings forces the general public to travel many months of the year without benefits of painted or marked lane lines and center lines.

All of us have driven on rainy nights on adequately marked highways and find the visibility difficult. This is compounded dramatically when one considers driving on a rainy night where there are no lines. This program has had tremendous benefits and should be expanded and continued in some form.

CONCLUSION: All safety construction programs, except the special bridge replacement program, should be consolidated into a single category with an increased level of funding. In addition, it is imperative that the continuity provided by the Highway Trust Fund be continued in order to provide for this funding.

EXPAND STATE AND COMMUNITY GRANT PROGRAMS

Having spent twenty years on the highway side of the traffic safety problem in virtually all aspects, including traffic operations, construction, design, maintenance, has not lessened my enthusiasm for programs dealing with the driver. You have heard testimony on the effects of alcohol in driving, the effects of lax enforcement of traffic laws, the tremendous overload on our court system, the impact of driver education and many other items dealing with driver behavior.

The highway system can be improved and will be improved at the federal, state and local levels only with some Federal-aid funding from the Highway Trust Fund. However, the highway cannot do the job alone. We strongly support the programs of the National Highway Traffic Safety Administration dealing with state and community grants (Sections 402 and 403). We note that proposed authorizations are considerable above actual expenditures in past years and feel that the job can be accomplished if these levels of funding are fully provided.

CONCLUSION: ARBA recommends that the funding for Sections 402 and 403 be substantially increased and that all of the safety funds be obligated.

UNSAFE BRIDGES

The National Bridge Inspection Program was established in 1970 as a means of obtaining an accurate inventory of all deficient bridges. Out of 230,000 bridges on the Federal-aid systems, a total of over 7,000 are classified as structurally deficient. Of this number, almost 3,500 are restricted to passenger cars only.

An additional 25,400 bridges are classified as functionally obsolete. Their design does not permit them to safely serve the road systems of which they are integral parts. In addition to these 32,400 deficient bridges, some 45,700 additional bridges are classified as functionally obsolescent. These bridges need to be replaced in a relatively short period of time.

The cost of replacing the 32,400 deficient bridges is estimated at \$10.4 Billion. It is significant to note that 31,000 of these critically deficient bridges presently require some form of load limit posting. Over 300 of these bridges are currently closed to all traffic. Under the very limited Federal-aid program now in effect, it will take over 60 years to just catch up with the currently deficient bridge needs!!!

CONCLUSION: ARBA recommends a substantial increase in the Federal-aid funding for the special bridge replacement program. We also recommend maintaining this program as a separate category of Federal-aid funding, within the Highway Trust Fund.

This concludes our testimony, Mr. Chairman. We appreciate this opportunity to present the views of the American Road Builders' Association.

STATEMENT TO THE TRANSPORTATION SUBCOMMITTEE OF THE
SENATE PUBLIC WORKS COMMITTEE ON BEHALF
OF THE NATIONAL HIGHWAY SAFETY ADVISORY COMMITTEE
BY GILBERT E. CARMICHAEL, CHAIRMAN, EXECUTIVE SUBCOMMITTEE

Mr. Chairman and members of the Committee, may I first take this opportunity to thank you on behalf of all the members of the National Highway Safety Advisory Committee for requesting our views here today. As a creature of Congress we welcome and appreciate this recognition of our existence and role by the Congress although we fully understand that our primary responsibility, under your statutory mandate, is to advise the Secretary of Transportation.

1. CHANGING ROLE OF THE NATIONAL HIGHWAY SAFETY ADVISORY COMMITTEE

The energy crisis changed the transportation thinking in this country. It also changed the role and functioning of this Advisory Committee. During those months of uncertainty and confusion in the fall of 1973, our Committee began asking the Department of Transportation a number of questions regarding the relationship of fuel shortages and highway safety--questions about speed limits, energy conservation, size and weight of motor vehicles, alternatives to automobile transportation, etc.

We continued to ask those questions over the next year or so. Most of our questions remained unanswered by the Department. Instead, DOT was asking us to look at a different set of questions which we felt did not address the important issues in highway safety and their relationship to the larger questions confronting the Nation--the energy crisis, the economy, and so forth. It was clear that the Committee and the Department were not communicating very effectively.

In the meantime, despite the repeated expressions of concern and inquiry from the Committee, the Department proceeded to take various positions on

legislation permitting heavier trucks on the Nation's interstate highways, national speed limits, etc. Some of those positions, we felt, were not in the best interests of highway safety.

We on the Committee decided it was time for DOT and ourselves to sit down together and face the question of first what our role was, what we were supposed to be "advising" the Secretary about anyway. We are all busy men and women with substantial personal, business, and professional responsibilities, and we had accepted Presidential appointments to this Congressionally-created Committee to play a meaningful role as citizen advisers with something more to offer our Government than rubber-stamped approvals of policies and programs already adopted and presented to us as fait accompli. As the saying goes, if we were going to be part of the landing, we wanted to be involved in the take-off as well. We recognized that our job was to advise only, but we really hadn't even been doing that.

In the background of this questioning self-appraisal by the Committee was the Federal Advisory Committee Act of 1972 by which Congress directed all Federal departments and agencies to take a look at the role and function of the proliferating number of advisory committees to determine which ought to be changed, which retained or consolidated, and which abolished.

We requested a "Think Tank" session with officials of DOT, including the Office of the Secretary, FHWA, and NHTSA, to exchange views on the future of our Committee. We ourselves expressed the position that the Department ought either to use us in a more meaningful way or to abolish the Committee. A copy of the report of that meeting is attached, but the gist of it was that our Committee ought to be continued and that it indeed ought to perform a true advisory role, both through more substantive

assignments from the Department as well as at our own initiative. We on the Committee have proceeded on that basis since then.

Our first action was to reorganize ourselves into what we felt was a more rational and pertinent structure, setting up three basic subcommittees dealing with the driver, the vehicle, and the highway environment. We also requested that DOT propose to Congress that the process by which our Chairman was appointed be changed so that a citizen member of the Committee, rather than an official of the Department, serve in that capacity.

Finally, we established a continuing subcommittee on State liaison. This liaison subcommittee, we believe, has performed an important and long-neglected function, i.e., serving as a two-way conduit of information and viewpoints between DOT and the highway safety people in the individual States. Meetings held in State capitals with State officials and legislators enable us to perform our role as citizen advisers to the Secretary in an even more substantive and constructive way. The positions we have taken as a Committee reflect not only our own individual opinions and backgrounds, but also the reaction and inputs gathered from private citizens and State officials across the country. We also developed a close working relationship with the Governors' Representatives on Highway Safety.

II. OVERVIEW OF HIGHWAY SAFETY PROGRAM

The ultimate question facing the Congress, the DOT, and the taxpayers and general public is whether the years of research and effort and the millions of dollars spent on highway safety have been effective in saving lives, reducing injuries, and lowering property damage and the other economic and social costs related to highway accidents.

There are bits and pieces of evidence in certain areas that the programs have worked to a certain extent. But there is so much we do not know--not because it cannot be known, but because we do not yet have the proper mechanisms at either the Federal or State levels for gathering, analyzing, and comparing the pertinent information. While fatality rates have gone down, numbers of deaths and injuries have gone up.

Then, after all the years of effort and the millions of dollars spent, one sudden new element helped produce dramatic results in saving lives and reducing injuries and damages--the energy crisis and its impact on motor vehicle driving in this country. This new element, which brought about less driving, slower driving, and more uniform driving speeds all combined, saved almost 10,000 lives in one year, with commensurately great reductions in the levels of personal injuries and property damage. And, as we know, at the same time, great quantities of precious fuel were being saved with commensurate benefits on the energy situation, the environment, and the economy. As Presidential Adviser William Seidman stated at the height of the energy crisis, fewer highway accidents also cut society's costs and have an anti-inflationary effect by reducing demands on hospital and medical facilities, emergency services, and so on.

So the energy situation had an almost immediate beneficial impact on highway safety. At the same time, however, there were other developments occurring because of the energy shortage which may have planted the seeds of higher accident, fatality, and injury levels somewhere down the road. I refer to the recent legislation permitting heavier trucks on the one hand, and on the other, the Federal pressures on Detroit to produce smaller and lighter automobiles. We fear that this could be a deadly combination--there is ample evidence that the mixing on the highways of different kinds of vehicles causes

more accidents, and the greater the disparity between the size, weight and speed of vehicles, the greater the likelihood of death and injury. In the same connection, the greater use of bicycles and motorcycles as serious modes of transportation adds another potentially dangerous ingredient to the mix since bicyclist and motorcyclist deaths have increased 12 percent from 1972 to 1974.

So there is that side of the energy-highway safety picture as well. Highway safety programs must obviously be formulated and carried out in the overall context of the "the three E's"--energy, environment, and economy. And, of course, that is the coordinating, rationalizing role that a national transportation policy ought to perform. We on the Committee do not believe the country has such a policy at this time.

An illustrative example of this state of affairs is the heavier truck legislation on which this Committee has spent a great deal of time and effort. It was a classic case of how highway safety must be integrated into a sensible balanced transportation policy. On one side of the equation is the question of safety on the highways. There was substantial information through prior studies, actual driver experience, and plain common sense--that large trucks present potential hazards on the highways, particularly to other motorists. Both the safety performance of trucks themselves, and the effects of trucks in causing other vehicle accidents through aerodynamic blast effects, spray, visibility problems, etc., had put DOT on notice for the past several years that a potential safety hazard already existed on the Nation's highways. For that reason, DOT--and the Congress--always resisted the pressures for larger and heavier trucks, until last year. Then the energy crisis provided the argument that reduced speeds and higher fuel costs were imposing an unfair and unacceptable economic burden on the trucking industry and, in effect, "wasting" fuel. So the Department revised its long-held position and supported

heavier trucks (in fact, even heavier than those Congress eventually authorized). Unfortunately, the following elements were missing from the equation and the policy process of balancing competing considerations:

- several truck safety studies which were either incomplete or not even underway at the time;
- the economic (and safety) impact of greatly increased highway damage and deterioration resulting from the heavier loads;
- the economic (and safety) effects of the heavier loads on the thousands of already inadequate small bridges, especially in rural areas; and
- the economic impact on the Nation's railroads as even more heavy freight would now be drained away from the rails and onto the highways.

To conclude this general section on the overall effectiveness of highway safety programs, three conclusions seem warranted:

1. We need to apply what we already know from the evolving "science of safety" in the areas of safer vehicles (e.g., better occupant packaging, sturdier frames, big trucks and small cars and bicycles don't mix well), safer driver behavior (e.g., slower speeds save lives), and the highway environment (e.g., elimination of roadside hazards, emphasis on safety improvements rather than new construction).
2. We need to get more and better information, not through exotic and costly new R&D programs but by effectively gathering, collating and comparing existing data on some uniform, national basis. We suggest the creation of data gathering systems, under joint cooperative sponsorship of Governors' Highway Safety Representatives and DOT.

3. We need to fit highway safety programs into an integrated national transportation policy dealing sensibly with "the three E's" so that we become less of an automobile-dominated society and so that automobile driving which is essential to our mobility is done in safer, more energy-efficient, cheaper, more environmentally-sound vehicles.

III. SPECIFIC COMMENTS ON SOME HIGHWAY SAFETY ISSUES

1. 55 MPH SPEED LIMIT

We strongly support the legislation establishing the 55 mph speed limit on the Nation's highways--both as a highway safety and energy conservation measure. We endorse DOT's efforts to ensure rigorous implementation and equitable enforcement of the speed limit by State and local authorities, as well as an effective Federal monitoring program.

2. HEAVIER TRUCKS

We strongly favor Congressional repeal of the heavier truck legislation and respectfully urge DOT to reconsider its position in light of both the increasingly available evidence on truck safety matters and the still incomplete truck safety studies. As a minimum, we urge the Department to call for a moratorium in the States on further action permitting heavier trucks pending completion of truck safety studies and/or, an overall high-level DOT review of truck safety matters. Finally, we urge the development of a national standard on truck sizes and weights applicable for all the Nation's highways, and at least to all Federal-aid highways.

3. UNIFORM DATA COLLECTION SYSTEM

In order to facilitate the collection, analysis, and comparison of highway safety information among the States and at the DOT, we recommend

the establishment of a uniform data collection system by DOT and the Governors' Highway Safety Representatives. A standard accident report form should be developed for use by all States.

4. HIGHWAY SAFETY STANDARDS

The existing standards should be reviewed and consolidated with several being grouped together under a new standard on accident data collection. There should also be a reexamination of the respective cooperative roles to be played by FHWA and NHTSA in the development and enforcement of the standards.

5. GOVERNORS' HIGHWAY SAFETY REPRESENTATIVES

The role of Governors' Highway Safety Representatives should be greatly enhanced and strengthened. They should play a major role in developing, in cooperation with DOT, the uniform data collection and reporting system. A national office in Washington should be established both to raise the visibility and stature of the Representatives and to enable them to serve a more effective role in dissemination of highway safety information and communications between DOT and the States.

6. ADJUDICATION AND ALTERNATIVE SENTENCING

The existing situation with regard to the judicial administration of traffic and driving offenses is ineffective, self-defeating, costly, and generally unsatisfactory, insofar as highway safety is concerned.

For example, despite the overwhelming evidence relating alcohol as a major causative factor in highway fatalities and injuries, and despite very tough laws against the drinking driver on the books of most States, judges generally are reluctant to enforce the harsh

sanctions of taking the offending driver off the road. There are several reasons for this but two seem to be predominate: (1) the recognition that harsh penalties by themselves without appropriate rehabilitative measures, do not solve the problem; and (2) since our economy is virtually totally dependent on the automobile, taking a man's license away is tantamount to depriving him and his family of his livelihood and source of income.

Our present punitive system for drunk driving may even be considered as a cruel and unusual punishment being inflicted on sick persons. The Advisory Committee is moving in the direction of recognizing alcoholism--even in its early stages--as an illness and has therefore recommended the study of alternatives to traditional court sentencing. It may be, in our mobile society, that there is almost a constitutional if not a moral right to have access to a personal car if adequate public transportation is not available.

The Committee is continuing to explore, with the encouragement and support of the Department of Transportation, means to improve the role of the courts in highway safety. Specifically, we will be studying viable problem driver diagnostic, sentencing and rehabilitation techniques, establishing liaison on traffic law adjudication and rehabilitation alternatives with the Departments of Justice and Health, Education and Welfare and with the American Bar Association, and seeking improvements in the training and qualifications of traffic court judges.

U. S. DEPARTMENT OF TRANSPORTATION
 NATIONAL HIGHWAY SAFETY ADVISORY COMMITTEE
 WORKING SESSION "THINK TANK"

SEPTEMBER 16, 1974

BACKGROUND

Members of the National Highway Safety Advisory Committee met in Washington, D.C., on September 16 in an informal working session to critically review the role, effectiveness and continued existence of the Committee.

ATTENDEES

Those Advisory Committee members present were: Joel Gustafson, Chairman, Executive Subcommittee; Messrs. Avery, Bosco, Carmichael, Hazners, Stevens, Sullivan, Tufaro, Mrs. Gnau and Dr. Ruth Winkler.

Also present were: NHTSA Administrator Gregory, NHTSA staff members Brandt, Carmichael, and Nichols; FHWA Administrator Tiemann, FHWA staff members Foley and Pletcher; OST representative Schmidt; National Motor Vehicle Safety Advisory Council members Millet, Smith, Wagar, and Mrs. Pattinson; National Conference of Governors' Highway Safety Representatives, Noel Bufer; special guest Thomas C. Morrill (former Chairman, NHTSA Executive Subcommittee).

Staff was represented by Messrs. Marsh and Miller and Mrs. Clark.

Under Secretary Barnum, Chairman of the Advisory Committee, joined the discussions in the afternoon.

The meeting opened with a brief statement by Mr. Marsh on the Highway Safety Act of 1966, establishing the Advisory Committee, and the Committee's continuation under the Federal Advisory Committee Act of 1972. This was followed by statements and discussion, as follows:

NHTSA

Dr. Gregory, Administrator

Dr. Gregory stated NHTSA would be happy to continue to work with the Committee and felt the Committee has and can further contribute materially to NHTSA's programs. He suggested that the Committee assist by talking with citizens and State officials on the benefits of continuing the 55 mile per hour speed limit. The Advisory Committee can help find out and urge development of better ideas--and probably encourage public acceptance of such ideas.

Dr. Gregory also stated that NHTSA has helped by getting out and listening. The impact of the energy crisis has shown that highway safety is largely "a people factor" problem. This puts the Advisory Committee into a position of inquiring what can be done. Dr. Gregory suggested working with the States on this question. He also said that the Committee is a gauge of public reaction and a source of new ideas; it provides a medium for active members to perform a valuable citizenship role of publicizing the highway safety

program, as well as soliciting citizen involvement, concerns and recommendations, such as the Committee-sponsored meeting on bicycling safety; it should help identify problems as well as suggest solutions; it can give the States added confidence that "something" is going on and help maintain and improve the Department's partnership with the States.

Dr. Gregory added that the Committee is helpful in raising issues publicly that the Government might find difficult to bring up on its own initiative. Dr. Gregory also said advisory committees tend to reflect public opinion and help bring reality closer to the managers of the Government's highway-motor vehicle safety programs.

Dr. James Nichols

Dr. James Nichols, head of the Driver Programs Branch in NHTSA, discussed the probability of success with driver improvement programs and made the following points:

- In absolute terms the highway safety problem appears large:
 - a. 55,000 fatalities,
 - b. 2 million injuries,
 - c. 17 million property-loss crashes.
- But in relative terms of 118 million drivers in the U. S.:
 - a. 99.95 percent are not involved in a fatal crash,
 - b. 99 percent are not injured,
 - c. 85 percent are not involved in a property-loss crash.
- The U. S. rate is the lowest in the world.
- The traffic system is already relatively "fine-tuned" in terms of safety.
- Absolute terms are useful in setting priorities and in determining relative degrees of program success.
- It is unfair to assume that "old things" haven't worked in highway safety.
- If a problem driver group is defined as those with four or more violations in the past 3-4 years, this group would be involved in only 1.5 percent of all crashes in any 1 year.

- Even a 100 percent effective program directed at problem drivers could reduce the number of all crashes only a very small amount: for example 600 drivers with prior DWI arrests would need to be 100 percent rehabilitated or otherwise restrained from driving to save one life.
- It's very difficult to do anything with the driver but the most probable program for success would be highly publicized enforcement of traffic laws.

FHWA

Governor Tiemann, Administrator

Administrator Tiemann said that there is some potential role for the Committee with NHTSA. As for FHWA, he stated that the relationship had been virtually non-existent in the past and he sees no reason to change that situation. He added that the initiatives for action must come from the Administration and not the Committee and he sees the role of the Advisory Committee in FHWA programs diminishing. He also stated that NHTSA is now needs an advisory committee but the FHWA is well established and does not need or want advice from the committee.

Mr. Foley

Mr. Foley, Director of FHWA's Office of Highway Safety, said the only recommendation from the Advisory Committee that FHWA agreed with and carried out was a special study of Interstate System accidents.

UNDER SECRETARY

Under Secretary of Transportation Barnum, who serves as Chairman of the Committee, made the following observations:

- The Committee should work on "bite-size" manageable problems such as those successfully pursued by the Committee's Ad Hoc Task Force on Adjudication.
- The Committee should focus on State hearings and evaluations-- always looking at the "bottom line" for payoff.
- The Committee should be continued and a way found to better tie in with the Department other than through the Under Secretary as the Chairman.

INVITED GUESTS

Mr. Noel Bufo

Speaking on behalf of the Governors' Highway Safety Representatives, Mr. Bufo made the following points:

- The Committee should bring the problem of highway safety before the people and keep it there.
- The Committee should focus more on ends and not the technicality of the means.
- The Committee should look at the areas of concern to the Governors' Representatives. (i.e. fast turnover of appointed Governors' Representatives which adversely affects progress and continuity and the threat of State highway department's takeover of the highway safety programs.)
- The Committee could be instrumental in influencing legislation affecting States.
- The Committee has an important role in keeping balance in the whole Federal-State system.
- The Committee and DOT should consider a merger of the Council and the Committee since the States are increasingly interested in the motor vehicle safety programs.

Mr. Herb Smith

Herb Smith of the National Motor Vehicle Safety Advisory Council suggested initiative should come from the Secretary or the Administrator--the need to have issues posed by the Department in addition to those developed by the committees. He also suggested more informal dialogue in addition to formal communications between the Department and the committees.

Mr. Thomas Morrill

Mr. Morrill made the following comments:

- Prior to the 1966 Highway Safety Act there was no leadership or real progress in highway safety, and a Federal leadership role is therefore necessary.
- Progress should not be measured by "deaths" but instead by the relative number of injuries per 1,000 cars: This has declined from 24 insurance injury claims in 1964 to 15 claims in 1972-73 to approximately 12 claims in 1974.
- Strengthening the Federal role is essential to further crash loss reduction.
- Problems affecting the Federal role were:
 - a. lack of continuity in leadership,
 - b. too much emphasis on education and enforcement,

- c. "dismal" progress in improving the safety of the highway environment.
- The weakness of the Committee has been in devoting too much time to NHTSA and not enough to FHWA programs: The Advisory Council is working on the big NHTSA payoff but no one is working on the highway environment under FHWA's jurisdiction.
- Suggests independent "press competence" for the Advisory Committee to carry word of its efforts to the public.

MEMBERS' STATEMENTS

Members of the Committee addressed several questions, comments, and suggestions to the DOT officials which in substance made the following points:

- Members questioned the relevance, timeliness and value of some of the assignments given to the Committee by DOT and noted especially the lack of meaningful relationships with FHWA;
- Expressed concern at failure of DOT (NHTSA, FHWA, and OST) to consult with or inform Committee, even in response to request, on several important recent developments in highway safety, e.g., overall effect of energy crisis and related transportation policies, national 55 mph speed limit, legislation permitting large trucks on Interstate;
- Inquired regarding the limits of the Committee's authority to initiate recommendations to DOT, to take public positions on highway safety issues, and to communicate with Congress in support of or in opposition to safety related legislation;
- Recommended expanded efforts in the areas of liaison with the States and citizen participation programs;
- Questioned the effectiveness of the existing subcommittee organization; and
- Expressed concern as to the duplication and lack of coordination with the National Motor Vehicle Safety Advisory Council (and possibly the Youths Highway Safety Advisory Committee).

CONCLUSIONS

The following changes in the organization and procedures of the NHTSAC are offered for consideration by members of the Committee and subsequently by the Department of Transportation:

Organization

- Selection of Chairman should be from the non-statutory membership of the Committee.
- The Committee should be restructured into standing subcommittees covering the following aspects of highway safety:
 - a. the driver,
 - b. the vehicle,
 - c. the environment.

This restructuring should not preclude the establishment from time to time of special task forces or other sub-groups to work on items of special interest to the Committee or the Department.

- Greater coordination with the National Motor Vehicle Safety Advisory Council through joint meetings and possibly future merger of the two advisory committees.

Procedures

- Greater initiative must be taken by the National Highway Safety Advisory Committee in advising the Department of Transportation (NHTSA, FHWA, OST), and in taking public positions on policies, programs, and issues affecting highway safety.
- The Department should provide more meaningful and substantive assignments for the Committee to deliberate and provide advice for the Secretary's consideration.
- The Department should provide timely opportunity for the Committee to comment on proposed legislation, policies, and programs prior to establishment of final DOT positions, where practicable.
- Expansion of existing Committee liaison meetings with States.
- Expansion of efforts toward greater citizen involvement through various methods, including regional conferences, where appropriate.



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JUNE 9, 1975

DEPARTMENT OF TRANSPORTATION
400 7TH STREET S.W., ROOM 5215
WASHINGTON, D.C.

ATTN: MR. GILBERT E. CARMICHAEL

GENTLEMEN:

I RECEIVED THE LATEST COPY OF THE DRAFT STATEMENT BEFORE THE HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE TODAY, AND ONCE AGAIN I WOULD LIKE TO STATE MY OBJECTIONS TO THE INFORMATION CONCERNING THE HEAVIER TRUCKS.

I HAVE QUESTIONED FOR SOME TIME WHETHER OR NOT THE COMMITTEE HAS NOT JUST ACCEPTED A RATHER ONE-SIDED STATEMENT OF FACTS FROM THOSE WHO OPPOSE HEAVIER TRUCKS IN PLACE OF TRULY SEEKING THE INFORMATION AS TO THE SAFETY OF THE HEAVIER TRUCKS AND THE REDUCTION TO THE 55 MILE SPEED LIMIT, ALONG WITH THE MOST IMPORTANT OF ALL QUESTION OF SAFETY FOR THE ADDITIONAL APPROXIMATELY 8000 POUNDS, AND I STILL ASK, WHY WE HAVE NOT BEEN FURNISHED OR HAD A REPRESENTATIVE OF THE TRUCK INDUSTRY OR THE INTERSTATE COMMERCE COMMISSION EXPLAIN TO THE COMMITTEE THE REQUIREMENTS BEFORE ANY TRUCK IS PERMITTED TO CARRY THIS MUCH WEIGHT.


I HAVE TALKED TO OUR HEADS OF THE HIGHWAY DEPARTMENT HERE IN ARIZONA AND FIND THAT IN THEIR OPINION THE HIGHWAY INTERSTATES WILL NOT BE AFFECTED BY THE EXCESS WEIGHT AS FAR AS THE LIFE OF THE HIGHWAY SYSTEM IS CONCERNED. THERE IS QUESTION AS TO WHETHER OR NOT THE SIDE ROADS CAN STAND THE ADDITIONAL WEIGHT, BUT I FIND IN THE WEST THAT MOST OF THE HEAVIER TRUCKS CARRY THESE LOADS BETWEEN POINTS AND THEIR TERMINALS ARE RIGHT AT THE EXIT OF THE FREEWAYS. I THINK THE STATEMENT THAT SOME OF THE OLDER BRIDGES, AND SO FORTH, WERE NOT BUILT FOR THIS WEIGHT APPLIES ONLY TO THOSE HIGHWAYS THAT ARE NOT INTERSTATE. I HAPPEN TO BELIEVE THAT THE ADDITIONAL WEIGHT DOES INDEED AFFECT THE ECONOMY OF THE TRUCKING

LINES AND BY THE REDUCTION TO THE 55 MILE AN HOUR SPEED LIMIT, THESE TRUCKS CAN CARRY THE EXTRA WEIGHT WITH SAFETY. HERE AGAIN, THE ENDORCEMENT OF THE 55 MILE AN HOUR SPEED LIMIT IS THE IMPORTANT FACTOR IN THAT DECISION.

SO, I QUESTION THE STATEMENTS MADE IN CONNECTION WITH THE HEAVIER TRUCKS IN THE STATEMENT THAT WAS FORWARDED TO ME, AS I DID IN THE LAST MEETING IN WASHINGTON. OUTSIDE OF THAT, I FIND IT TO BE VERY INTERESTING AND DEFINITELY ENDORSE THE REST OF THE STATEMENT.

I MEANT TO QUESTION THIS BEFORE AND THEN, UNFORTUNATELY, DUE TO THE PRESS OF TIME AND OTHER AGENDA ITEMS BEING SCHEDULED, IT SEEMED RATHER ANXIOUS TO BRING IT IN, BUT I WOULD LIKE TO NOW ASK THE QUESTION AS TO THESE MEETINGS HELD AROUND THE COUNTRY, WHY IT SELMS TO BE THAT THE SAME PEOPLE ARE SENT TO THESE MEETINGS AND THEN WE RECEIVE A BRIEF OUTLINE AS TO THE ACTUAL SUBJECTS REFERRED TO AND DISCUSSED AT THE MEETINGS. SINCE I HAVE BEEN ON THE COMMITTEE IT SEEMS THE SAME PEOPLE ARE SELECTED TO GO TO THESE VARIOUS MEETINGS AROUND THE COUNTRY AND IT DOES, IN MY OPINION, RAISE THE QUESTION AS TO WHETHER OR NOT THE PURPOSE OF THE MEETINGS ARE BEING SERVED IF THE SAME PEOPLE APPEAR AT DIFFERENT MEETINGS ON DIFFERENT SUBJECTS UNLIKE, AS A WHOLE, THE MANPOWER OF THE COMMITTEE IS NOT BEING USED TO INTERJECT THE THINKING FROM VARIOUS SECTIONS OF THE COUNTRY IN PLACE OF JUST A SMALL SEGMENT. THESE COMMENTS ARE MADE IN THE INTEREST OF GETTING MORE PEOPLE INVOLVED WITH THESE VERY IMPORTANT AND INTERESTING SUBJECTS.

VERY TRULY YOURS,


FRANK P. HIDDLETON

FPN:EJ

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY SAFETY ADVISORY COMMITTEE
WASHINGTON, D.C. 20591

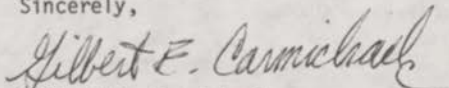
JUL 29 1975

Honorable Lloyd Bentsen
Chairman, Transportation Subcommittee
U. S. Senate Public Works Committee
Washington, D. C. 20510

Dear Mr. Chairman:

I am enclosing two additional comments which I respectively request be appended to my formal statement filed with the subcommittee July 28, 1975. The comments represent the views of fellow Committee members, Dr. Susan Baker and Mr. Robert Shertz, on my formal statement on the activities of the National Highway Safety Advisory Committee. Although members Baker and Shertz were appointed to the Highway Safety Advisory Committee subsequent to the period that my testimony relates to, I believe their independent comments deserve to be incorporated in the formal meeting record.

Sincerely,



Gilbert E. Carmichael
Chairman, Executive Subcommittee

Enclosures

cc: Dr. Baker
Mr. Shertz

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SCORE

Safety Committee on
Research & Environment

Robert H. Shertz, Chairman

William E. Johns, Coordinator
(202) 797-5339

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(202) 797-5340

June 19, 1975

Mr. Gilbert E. Carmichael
President
Carmichael Volkswagen
P. O. Box 5673
Meridian, Mississippi 39301

Dear Gil:

I enclose my comments on the basis of the draft statement, for presentation before the Public Works Committee which you furnished us at the last Advisory Committee Meeting.

You will, of course, note substantial differences between my draft and yours. I have furnished a copy of my draft to Frances Clark with the suggestion that my draft be prepared as an alternate presentation to the Committee and that I have time to circulate it to all of the Advisory Committee members for their consideration and adoption.

If, in light of my comments, you decide to modify your draft, I should like to be informed as soon as convenient for you.

Sincerely,



Robert H. Shertz

RHS/slm

cc: Frances Clark

Comments by Robert H. Shertz on Draft Statement to Congress on behalf of the National Safety Advisory Committee by Gilbert C. Carmichael, Chairman, Executive Committee.

First, I wish to emphasize that my comments are limited by the assertion by Gil Carmichael that his statement reflects the views of the Committee as constituted before the last meeting. For that reason, I am not questioning his criticism of the Department of Transportation and his views as to the changing role of the National Highway Safety Advisory Committee except that my review of the files indicates to me that the Department answered questions raised by the Committee but the answers were not always what the Committee wanted.

Second, I wish to commend the Committee on its reorganization. The structure of the Committee, which gives recognition to the three basic elements of highway safety, i.e., the driver, the vehicle and the highway environment, is the same as the structure which has been maintained by the trucking industry safety committee for several years, and will permit effective interface.

Third, I agree that the energy crisis has been an extremely significant factor in reducing fatalities on the highway. However, I do not think we should so concentrate our thinking on this subject that we ignore other factors that have also contributed to this very beneficial result. The principal additional factor is the increasing use of safety belts and other restraints. The validity of this conclusion is demonstrated by the fact that

the actual number of fatalities (as well as the rate) was reduced from 55,685 in 1972 to 55,096 in 1973 after having increased from 53,746 in 1971.⁽¹⁾ The effect of the energy crisis was of short duration in 1973 while the use of safety belts substantially increased during that year. In view of the Congressional action on this subject and the campaign of the Department of Transportation for mandatory safety belt laws, this factor should be stressed. In addition, other factors, particularly the growing efforts of both government and private agencies in furthering public awareness of accident prevention methods must be given credit for contributing to this improvement.

Fourth, I emphatically disagree with the comments and conclusions relating to the support given by the Department of Transportation to the recent change in the ceiling on truck weights on the Interstate System. I am convinced that the Department's reply to the Committee's recommendation released to the Committee on May 20, 1975 is adequately supported by all available data and should be included in full text in any report made by any representative of the Committee to a Congressional Committee.

After having reviewed the transcript of the meeting, on which Mr. Carmichael's conclusions are apparently based, and after having reviewed other available published data, I am convinced that there is no valid basis for the conclusions contained in the proposed draft on this subject.

My specific disagreements are as follows:

1. Draft, Page 4..."At the same time, however, there were other developments occurring because of the energy shortage which may have planted the seeds of higher accident, fatality, and injury levels somewhere down the road.

(1) Federal Highway Administration report "Fatal and Injury Accident Rates on Federal Aid and Other Highway Systems", 1973.

I refer to the recent legislation permitting heavier trucks on the one hand and on the other, the Federal pressures on Detroit to produce smaller and lighter automobiles. We fear that this could be a deadly combination - there is ample evidence that the mixing on the highways of different kinds of vehicles causes more accidents, and the greater the disparity between the size and weight of vehicles, the greater the likelihood of death and injury

I vigorously disagree with the implications of these statements as related to the particular legislation to which Mr. Carmichael refers. I contend there is no credible evidence that "the mixing on the highways of different kinds of vehicles causes more accidents." Furthermore, I know of no credible evidence to support the statement that "the greater the disparity between the size and weight of vehicles, the greater the likelihood of death and injury" as this relates to the recently authorized increased weight of commercial vehicles on the Interstate system.

The laws of physics are such, of course, that any collision of vehicles will produce damage and possible injuries. It is also true, as a matter of physical fact, that if a small vehicle is in collision with a larger one, the occupants of the lighter vehicle are more likely to be injured than those of the heavier. However, as our country has grown and has become increasingly dependent upon the economical transport of goods by highway carriers, the available facts are that accidents and fatalities, related to vehicle miles traveled, have improved, rather than worsened. The large motor carriers of the country-those who transport the goods of others for nearly 40 years have been required to report their accidents to the Federal Government. The most recently published data relating these accidents and their consequences to miles of motor carrier operation are the 1971-1972 data of the Bureau of Motor Carrier Safety. The accident and fatality rates for those years for these carriers, who now operate

approximately 16 billion vehicle miles each year, were markedly lower in 1971 and in 1972 than in any of the previous 10 years, a period when intercity truck miles of those carriers increased from 9 billion to 16 billion per year.

I certainly am not complacent about actual increases in accidents and fatalities and am dedicated in my work with the trucking industry and the National Safety Council to attempt to reduce the numbers. However, I think that we must recognize that greater exposure caused by more operating miles must be taken into consideration in assessing highway safety progress and that rate is certainly the most valid measure.

If there is ample evidence to support Mr. Carmichael's conclusion as to the mixing effect, it must be in the transcript or in other data.

As to the transcript of the meeting of February 18, 1975, the following must be noted:

(a) The testimony of Marie Eldridge. This was a new calculation of fatalities per 100 injuries which was related to weight brackets. It did not show the number of actual fatalities in each weight bracket and was computed from a selection of only 13,177 accidents. Ms. Eldridge, herself admitted that these conclusions were tentative and as to them, Mr. Charles Scheffey testified at p. 1-210:

"I would simply point out at this time, that the statistics presented was a fatality out of a total hundred injuries, producing accidents.

It has nothing to do with the incidents of accidents, or the numbers of fatalities per hundred million vehicle miles.

I think when I have other statistics to present, we will show that this is not the entire picture, and that one has to be careful in how you use these statistics in reaching conclusions with relative importance of this problem."

Also, Susan Baker stated at p. 1-260:

"That I cannot tell you whether it is exponential or (not). I was not impressed with Marie Eldridge's figures."

The other statistics to which Mr. Scheffey referred in his statement quoted above were (p. 1-217):

"I will have to go directly to the second pairing of the medium weight vehicles from 24,000 to 41,000, and those 41,000 to 72,000; essentially, what they show is that fatality rates measured on a basis of fatalities per hundred thousand vehicle miles, are almost identical.

Susan Baker testified as a result of a limited study of 150 crashes in 1973 made in Maryland:

"There is no question in my mind, but what you are going to increase, the lethality of these crashes, if the weight of the transportation, the trucks, is increased. (page 1-260)

Yet, when we consider studies on a national basis, and including all accidents and fatalities we do not find evidence to support the conclusion in the draft.

It is obvious that the maximum mixing effect of all sizes of traffic is on the Interstate System and, as Mr. Scheffey testifies (p. 1-214):

"We already have operating on our highway systems, vehicles well in excess, both with respect to axle loadings, tandem axle loadings, and gross weights, those provided in the new federal legislation."

Statistics contained in the Federal Highway Administration Report on Fatal and Injury Accident Rates on Federal-aid and Other Highway Systems/1973, show the following Fatality Rate Trends by Highway System, U.S., 1967-1973, per 100 million vehicle miles:

The most varied mix - interstate urban:
1.87 - 1973 (down from 2.21 in 1968)

Next in variable mix - interstate rural:
2.75 - 1973 (down from 3.77 in 1968)

All other urban:
3.04 - 1973 (down from 3.74 in 1968)

All other rural:
6.45 - 1973 (down from 7.50 in 1968)

2. Draft, Page 5...."Highway safety programs must obviously be formulated and carried out in the overall context of the "three E's - energy, the environment, and the economy. And, of course, that is the coordinating rationalizing role that a national transportation policy ought to perform. We on the Committee do not believe the country has such a policy at this time."

I cannot find any factual basis for the underlined conclusion and the recent record shows no discussion of this subject.

On the contrary, the country does have a National Transportation Policy and it is contained in that part of the Interstate Commerce Act which was enacted in 1940. It states:

"It is hereby declared to be the National Transportation Policy of the Congress to provide for fair and impartial regulation of all modes of transportation subject to the provisions of (the Interstate Commerce Act), so administered as to recognize and preserve the inherent advantages of each; to promote safe, adequate, economical and efficient service and foster sound economic conditions in transportation and among the several carriers; ... all to the end of developing, coordinating and preserving a national transportation system by water, highway and rail, as well as other means, adequate to meet the needs of the commerce of the United States, of the Postal Service, and of the National Defense."

The significant phrase for this discussion contains the policy "to promote safe, adequate economical and efficient service and foster sound economic conditions in transportation." I think that it is broad enough to encompass "the three E's" and, more important, it provides a sound basis for the Department's position in supporting the weight law.

3. Draft, Page 5...."There was substantial information through prior studies, actual driver experience, and plain common sense - that large trucks present potential hazards on the highways, particularly to other motorists. Both the safety performance of trucks themselves, and the effects of trucks in causing other vehicle accidents through aero-dynamic blast effects, spray, visibility problems, etc., had DOT on notice for the past several years that a potential safety hazard had already existed on the nation's highways. For that reason, DOT - and the Congress - always resisted the pressures for larger heavier trucks."

"The safety performance of trucks themselves" has already been discussed and I repeat that a substantial reduction in the rate of truck accident frequency and fatalities from 1960 to 1972 has been documented by the Bureau of Motor Carrier Safety.

The comment about vehicle accidents through aero-dynamic blast effects, spray and visibility problems requires discussion.

During the testimony of Francis DeLorenzo, Mr. Bosco and Mr. Carmichael attempted diligently to elicit testimony as to passing effects of trucks on cars but no evidence was available.

The only light that Mr. Scheffey could throw on the problem was a deviation of a station wagon under the worst possible simulated conditions. There is no real study to determine actual passing effects of trucks and cars.

Further, there is no evidence whatsoever of accidents, much less fatalities, caused by aero-dynamic blast effects, spray or visibility problems and certainly no evidence that the 9 per cent increase in weight has any relation to the problem. In the Summary of Accident Investigations, 1971 and 1972, prepared by the Bureau of Motor Carrier Safety, except for fog chain reaction accidents, there is no accident in the Summary alleged to be caused by these factors.

In addition, Lester Lamm, Executive Director of the Federal Highway Administration, made the following statement in his testimony before the Senate Committee on Public Works:

"Splash and spray, and other aero-dynamic effects of large commercial vehicles, have been mentioned as annoyances, and perhaps safety problems, to some private motorists. Such effects are highly sensitive to speed variations, and to the shape and configurations of the vehicles involved. They are almost totally insensitive to the weights of the vehicles, either as an absolute or a relative matter."

Yet, Mr. Carmichael argues that these factors put DOT on notice that a potential safety hazard existed on the nation's highways. Nobody will deny that the Department of Transportation is constantly on notice as to the potential safety hazard that exists on our highways. The National Highway Traffic Safety Administration has been diligent in conducting many studies and substantial rule making as to vehicle component performance to remedy this situation. The Bureau of Motor Carrier Safety in the Federal Highway Administration is doing the same thing for driver performance. The National Safety Council is promoting defensive driving courses and with many other organizations is attempting to control the alcohol and drug problem. The trucking industry's committee of top executives has been engaged in many efforts to control this potential hazard, but there is no evidence of any substance that the potential highway hazard is increased by the weight bill.

Mr. Carmichael then states that, because of this potential, DOT "always resisted the pressure for larger and heavier trucks. Until last year." In the first place there was no pressure for larger trucks. Size was not involved in the federal law. Secondly, DOT, and the predecessor of the Federal Highway Administration, the Bureau of Public Roads, have consistently supported the same axle weight limitations and higher gross weights as those enacted by the Congress in 1974.

Support No. 1 - 1964, Bureau of Public Roads (then in the Department of Commerce) filed with the Congress a report entitled "Maximum Desirable Dimensions and Weights of Vehicles Operated on the Federal-Aid Systems" (House Document No. 354, 88th Congress, 2nd Session.)

Support No. 2 - 1969, Testimony of Frank Turner, Federal Highway Administrator, before the Subcommittee on Roads of the House Public Works Committee in the 91st Congress.

The then Federal Highway Administrator testified:

"We have no difficulty with the proposals in the bill, (H.R. 11870) which would allow vehicles on the Interstate system with single axle loads up to 20,000 pounds including tolerance, tandem axle loads up to 34,000 pounds, including tolerances, and an overall gross weight computed in accordance with the formula presently in the bill. These load limits were contemplated in the 1964 report to Congress and the Interstate system is being designed to carry vehicles of these weights...."

As to the safety of these heavier vehicles, he said:

"Safety is the first concern of the Department of Transportation. Mr. Chairman, I will repeat that, as the Secretary has stated over and over again, safety is the first concern of this Department which he heads. We carefully reviewed the available material in an effort to determine whether these larger vehicles if authorized, would increase the number or frequency of vehicle accidents on the road. Our analysis covered the records, work and information available within the Bureau of Motor Carrier Safety, the National Highway Safety Bureau and the Bureau of Public Roads; The experience of several trucking companies which now operate large vehicles under special permit or other arrangements; accident records of a major toll road which presently allows such trucks to operate; statistics compiled by the National Safety Council; and prior evidence as collected in the earlier report to Congress on this subject by the Secretary of Commerce in 1964, printed in House Document #354, 88th Congress.

Nobody, of course, can say with finality whether the increased sizes and weights contemplated by these measures would result in an increase in the accident involvement by these or other vehicles.

However, we do know that larger vehicles are not now involved in an inordinately large proportion of accidents. A comparison of the available operating experience records of trucks of various sizes on routes where the largest vehicles are now permitted to operate indicate that the accident rate of the largest trucks is actually lower than that of smaller ones.

Various reasons may be advanced for this. For example, these larger and hence more costly vehicles are usually operated by companies in a better financial position to maintain them and are driven by the most experienced drivers.

Whatever the cause, there does not appear to be any statistical basis for assuming that vehicles of the size being proposed by these bills would be any more likely to be directly involved in accidents than the large vehicles presently on the roads which they would replace over a period of ten years. However, evidence is scarce on whether the presence of the larger vehicles might indirectly cause more accidents... But the available information respecting actual operating experience with these larger vehicles does not appear to us to support a contention that there is more likelihood of an automobile having an accident with a larger truck than with a smaller one. Whether the proposed incremental increase in truck size would significantly aggravate adverse drivers reactions beyond that already induced by the present truck sizes is, of course, not subject to precise measurement. Highways of present interstate design standards make adequate safe provision for passing or overtaking such vehicles. While I fully appreciate the effect that present large trucks have upon the mental and emotional attitude of the general motoring public, it would be pure speculation on anybody's part to state that this apprehension would be significantly different because of the increment of change in size and weights should this legislation be enacted."

4. Draft, Page 5..."So the Department revised its long-held position and supported heavier trucks (in fact, even heavier than those Congress eventually authorized)

It is submitted that the Department did not revise its position but merely reiterated its long-held position that heavier truck weights should be authorized. It is true that the Department's support was for heavier gross weights than eventually authorized and that the change be mandatory and not merely permissive as contained in the present law.

5. Draft, Page 6..."Unfortunately, the following elements were missing from the equation and the policy process of balancing competing considerations:

- several truck safety studies which were either incomplete or not under way at the time
- the economic (and safety) impact of greatly increased highway damage and deterioration resulting from the heavier loads
- the economic (and safety) effects of the heavier loads on the thousands of already inadequate small bridges, especially in rural areas
- the economic impact on the nation's railroads as even more heavy freight would now be drained away from the rails and onto the highways."

Mr. Carmichael does not specify the nature of the missing safety studies. However, from the transcript it appears that he is probably referring to the study in progress which classifies accidents by gross weights. In order to assess the importance of such a study to the Department's policy decision, it is necessary to determine whether there is persuasive evidence that such a study will produce facts to change that decision. I have already quoted Mr. Scheffey's conclusion from an earlier study which demonstrated about the same fatality rate from trucks in 24,000 - 41,000 group and trucks in the 41,000 - 72,000 group.

In addition, there is the following testimony by Lester P. Lamm, Executive Director of the Federal Highway Administration before the Senate Committee on Public Works on March 26, 1974:

"The traffic mix situation between cars and trucks should be alleviated by our proposal. Fewer truck trips would be required to carry the same amount of cargo, while car trips would remain controlled by existing factors such as availability of fuel. We have no evidence that the growing percentage of smaller and more agile cars in the vehicle population will have any greater difficulty avoiding conflict with trucks than would very large cars. Likewise, it appears in almost all cases to make no difference whatsoever whether a car collides with a 70,000 pound or 90,000 pound truck. A car of any size invariably is at a disadvantage in a conflict with a tractor-trailer rig of any size, since at all highway speeds the 'G' forces at work result in a potential fatality situation.

It should also be recognized that trucks and buses in interstate commerce have been subject to Federal safety regulation for 40 years. That regulation covers not only the safety aspects of the vehicle, but also regulates both the qualifications and the maximum hours of service of drivers. These regulations have constantly been kept up to date. The driver qualifications were completely revised in 1970 setting a much higher standard for driver competence and training than had existed previously. These Federal regulations have, in many respects, been adopted in whole or in part by state regulatory commissions to be applicable to intrastate movements of those vehicles. As a matter of simple business survival, motor carrier companies must maintain a very high degree of safety performance in their operations.

There are other compelling considerations, in addition to money costs, to produce this result. Motor carriers who transport for others must do so under the authority of certificates issued by the Interstate Commerce Commission. When the Department of Transportation Act was enacted, Section 4(e) was included to require the Secretary of Transportation to report to the Interstate Commerce Commission on the safety performance of every applicant who went to the Commission for extension of its operating rights, or for authority to acquire another carrier. The DOT may go before the ICC to ask it to withhold grants of temporary authority to carriers whose safety compliance is unsatisfactory. The Federal Highway Administrator himself may enter a "cease and desist" order to any firm operating trucks under this jurisdiction when a safety compliance is unsatisfactory. Therefore it is my considered judgement that there is no basis upon which to go before a congressional committee to contend that the 1974 legislation was unwise from a safety standpoint.

The allegation that the economic and (safety) impact of greatly increased highway damage and deterioration resulting from heavier loads was missing from the equation is just not in accordance with fact.

There was ample evidence from studies by responsible and competent highway engineers and by the American Association of State Highway and Transportation officials that the Interstate System was built for axle loads equivalent to those authorized and for greater gross weights and that the economic impact is favorable. In his testimony in 1969, Frank Turner, the Federal Highway Administrator stated:

"From these considerations it seems apparent that the proposed increase in axle weight limits would have relatively little significance in its effect on relative structural life of the highway."

The same is true of the economic and (safety) effects of heavier loads on bridges. As to this, Mr. Turner stated:

"Our greatest concern for the effect of increased truck weights results from the fact that there are many bridges in the nation on which no accurate data are presently available as to the bridge structural capacity rating. Bridges rated as H20 and HS20 designed loading are capable of carrying the proposed axle loads without overstress. These are the type structures being constructed on the Interstate system and on other Federal and State systems carrying the large traffic volumes. Bridges rated as H15 and HS15 design load capacities can carry these loads within allowable overstress and all recently constructed bridges on Federal-aid primary and secondary projects are being designed to at least this H15 loading standard While many bridges off the Interstate system are incapable of accommodating indefinite repetitions of the axle or gross loads now proposed, neither are they capable of accommodating vehicles at the current legal limits without shortened lives. Wholesale replacement of many thousands of old and inadequate structures is a necessity whether or not the load limits are increased."

It is important to consider in this connection, that the law passed by Congress is permissive only and applies to the Interstate System only. If a state decides to increase its weights to the new federal limits, it can restrict, as it does now, the application to bridges and roads incapable of handling the weight.

As to the economic impact on the nation's railroads, the significant facts are that Congress, in its 1940 National Transportation Policy clearly intended the Interstate Commerce Act to be administered so as to assure the maximum economic benefit to the nation in a way to achieve the most efficient form of transportation by whatever mode was involved.

The simple fact is, it seems to me, it is necessary for us to think in terms of the total needs of the nation's economy.

Just as the railroads are superbly equipped to handle particular types and volumes of the nation's goods over long distances, it is equally clear they are not able to meet the needs of the economy in other respects. Furthermore, the shippers of goods know when they must have the flexibility and the speed associated with highway transportation of goods which need expeditious handling, just as they are able to evaluate when railroad service is the method best suited to meet their needs.

The fact is that highway transport is indispensable in moving so much of the goods we use in our daily lives and that are needed in the conduct of business. Therefore, it makes sense for our highway system to be utilized as productively as possible and to assure that the consumer is afforded the most efficient form of transportation service at reasonable cost.

For many years, this nation has invested enormous sums of money in its highway systems. The Federal involvement in assisting in the design, construction and financing of highways now is 60 years old. The construction of the Interstate system authorized by the 1956 act, represents a magnificent undertaking by government to provide the means for the most efficient transportation of people and goods the world has seen. Furthermore, a wise provision of the 1956 legislation requires the cost to be born by special taxes on those who utilize the highways. It is also important to note that in 1956, when the Interstate system was funded and the federal financial participation was set at 90 percent, Congress directed that the system be designed for "...types and volumes of traffic forecast for the year 1975..." Subsequently, the design year was set to be 20 years in the future. Thus, we have a tremendous undertaking to meet the needs of the country, representing an investment which is not now being fully utilized.

Mr. Carmichael seems to indicate that there is a significant amount of freight in the 73,280 - 80,000 pound bracket which would shift from rail to truck because of this law. There is no evidence whatsoever of this fact.

I strongly endorse specific comments on:

1. 55 mile per hour speed limit
3. Uniform data collection system
4. Highway safety standards
6. Adjudication and alternate sentencing

I think that a special commendation should be accorded to Justice McQuade for his innovative efforts in the Adjudication and Alternate Sentencing field.

I have reservations about comment 5 relating to Governor's Highway Safety Representatives since it involves the sensitive area of federalizing state functions.

THE JOHNS HOPKINS UNIVERSITY

SCHOOL OF HYGIENE AND PUBLIC HEALTH

DIVISION OF FORENSIC PATHOLOGY

Department of Public Health Administration

111 Penn Street, Baltimore, Maryland 21201

Memo to Mr. Gilbert E. Carmichael

Copies to members of the National Highway Safety Advisory Committee

Date: July 21, 1975

I would like to comment on several points raised by Mr. Shertz's June 23 memo to you.

1. (re page 2, top) The best available data on belt usage indicate that there was little or no increase in belt usage from 1972 to 1973. Furthermore, there is no evidence that "public awareness of accident prevention methods" (end of same paragraph) has reduced fatalities. Therefore I believe the Committee should not cite these factors as possible explanations for decreased fatalities following the energy crisis.
2. With regard to statistics on fatal and injury accident rates by type of highway (bottom of page 5, top of 6): it is not valid to draw conclusions from these statistics as to the effect of vehicle mix, since so many other factors known to be related to crash rates also vary with type of road. Scott and associates looked at the problem of vehicle mix on specific turnpikes and found that trucks were over-involved as the striking vehicle in rear end collisions when other factors, including mileage, were carefully controlled for.
3. I agree with Mr. Shertz on several points:
 - a. The sentence on page 5 of the Carmichael draft, page 6 of the Shertz letter, that reads "We on the Committee do not believe the country has such a policy at this time" should be deleted, in my opinion.
 - b. The sentence on page 5 of the Carmichael draft, page 7 of the Shertz letter, reading "For that reason, DOT - and the Congress - always resisted the pressures for larger heavier trucks" should be deleted or corrected unless there is evidence that they did resist pressures, and for that reason.
 - c. Page 5 of draft, 10 of Shertz letter: the phrase "revised its long-held position" should be deleted if it can't be substantiated.


Mr. Gilbert E. Carmichael
July 21, 1975

4. I see no reason that the conclusions and recommendations of the Committee with regard to truck weight regulations should be substantially altered. Not only are collisions involving heavy trucks more likely to be fatal than other collisions, but Marie Eldridge's data showed that the ratio of deaths to injuries increased with truck weight. This is a very important statistic - even though, as Mr. Speffey indicated, it is not related to crash frequency. Assuming that our primary goal is the reduction of injuries and deaths, these are the data most pertinent to the question - not, as Mr. Shertz suggests, rates per 100 million mile. (Incidentally, what I said at the February 18 meeting, was "I was most impressed by Marie Eldridge's figures," not "I was not impressed...") the Eldridge data, although tentative at the time, have since been published. A report on the study I described at that meeting is now available, and a copy is enclosed.

The results of another Maryland study, not reported at the February 18 meeting, have just been released by the Insurance Institute for Highway Safety (Status Report, July, 1975). One finding is that tractor trailers registered in Maryland are about five times as likely as automobiles to be involved in fatal crashes in Maryland. Although this is probably due in large part to differences in mileage, there are important policy implications: whatever the explanation for the increased involvement, a vehicle which is at extra high risk of being involved in a fatal crash has extra great need of being modified to reduce the severe consequences of these crashes. Although the study does not provide data on separate weight classes of heavy trucks, three points should be remembered:

- a. The Eldridge data indicate that severity of injury increases with truck weight, especially above 60,000 pounds.
- b. Wherever the effect of weight differences have been adequately analysed they have indicated that as a vehicle's weight increases, so does its adverse effect on the occupants of vehicles it strikes. Even though most studies have not included data specific to the weight ranges in question, there is no reason to think the law of physics will be repealed in the case of large trucks.
- c. Despite arguments that collisions with 70,000 pound trucks involve forces of such magnitude that increasing the truck weight could not make matters any worse, it is worth noting (Maryland data) that even in fatal collisions between cars and tractor trailers 44% of the car occupants survived - so there is room for the fatality rate to be even worse as the forces increase (which they do, proportionally with weight).

I greatly appreciate the effort that goes into trying to pull together the results of a committee's deliberations, and am grateful for your willingness to take on the task.


Susan P. Baker, M.P.H.
Associate Professor

FATAL TRACTOR TRAILER CRASHES:
CONSIDERATIONS IN SETTING RELEVANT STANDARDS

Susan P. Baker
The Johns Hopkins School of Hygiene and Public Health

Jackson Wong
Insurance Institute for Highway Safety

William C. Masemore
Office of the Chief Medical Examiner of Maryland

July 14, 1975

Presented at the Fourth International Congress on
Automotive Safety, San Francisco, California, July
14-16, 1975.

FATAL TRACTOR TRAILER CRASHES:
CONSIDERATIONS IN SETTING RELEVANT STANDARDS*

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ABSTRACT

A series of 150 fatal crashes involving tractor-trailers was examined retrospectively. There were 19 single vehicle and 131 multi-vehicle crashes.

Tractor-trailers were more likely to be the following vehicle in rear-end collisions, except for those that occurred on an upgrade. Vehicle failures were noted for 15 tractor-trailers, compared with two of the vehicles they collided with. There were no deaths to tractor-trailer occupants following collision with a car unless in addition to striking the car there was another major impact. Underride occurred in 9% of the collisions with cars. Of 41 fatally injured occupants of tractor-trailers, at least 8 were ejected and 8 trapped in the tractors (other than by fires) for prolonged periods. Post-crash fires occurred in 8% of the crashes.

The paper discusses the need for adequate braking, improved ability to maintain speed, and weight limits that do not negate loss reduction benefits achieved under other regulations. Other recommendations include improved protection against side- and rear-underride by cars and better crash protection for occupants of truck tractors. To discourage present tendencies to sacrifice the safety of truck occupants in the interest of greater payloads, limits for length and weight should be exclusive of the tractor.

*This investigation was supported by the Insurance Institute for Highway Safety and the Maryland Medical-Legal Foundation

INTRODUCTION

Fatal crashes in Maryland that involved tractor-trailers were studied retrospectively. Of particular interest were characteristics of the tractor-trailers related to the frequency and severity of crashes. Crashes involving tractor-trailers are of special interest because they are more likely to have serious consequences than most other motor vehicle crashes. In Maryland, for example, tractor-trailers comprise more than twice as large a percentage of the vehicles in fatal crashes as compared to non-fatal crashes.

STUDY GROUP AND RESULTS

Using medical examiner and police reports, 150 fatal crashes involving tractor-trailers were identified for the four-year period 1970-1973. Nineteen of the crashes involved only a tractor-trailer; 131 involved a tractor-trailer (moving or non-moving) and at least one other motor vehicle. Collisions fatal only to pedestrians or bicyclists were not included in the 150 crashes reported here.

For each multi-vehicle collision (including those that involved three or more vehicles) two vehicles were studied: the tractor-trailer and the first vehicle it contacted. Table 1 shows the types of vehicles that collided with tractor-trailers.

There were 174 deaths in the 281 vehicles studied. (The total number of persons killed in these crashes is slightly higher, since 6 deaths occurred in 37 vehicles excluded from the study.) For the 131 multi-vehicle collisions, 14% of the study deaths (21 out of 154) occurred in tractor-trailers and 86% in vehicles other than tractor-trailers. For all 150 collisions, including the single-vehicle crashes, only 24% of the study deaths were to occupants of tractor-trailers.

The following description of 1) pre-crash, 2) crash, and 3) post-crash vehicle factors will discuss characteristics of tractor-trailers that (singly or in combination) may increase either 1) the likelihood of crashes, 2) the occurrence or severity of injury to occupants of either the tractor-trailers or the vehicles with which they collide, or 3) the severity of the consequences (1).

Pre-Crash Factors

One factor probably influencing the likelihood that tractor-trailers will be involved in crashes is their ability to maintain speed on a grade, relative to other vehicles, when heavily loaded. Of 39 rear-end collisions between tractor-trailers and other vehicles, at least 17 occurred on a grade. (The direction of grade was not always known.) The tractor-trailer was the lead vehicle in seven of the eight collisions known to have occurred on an upgrade (Table 2).

Another factor is a vehicle's ability (relative to other vehicles in the traffic system) to slow or stop. This is affected by the relationship between a truck's speed and braking ability. The majority of present tractor-trailers have poorer braking ability than cars. Table 2 shows that, of the 31 rear-end

Table 1

Type of Vehicle that Collided with Occupied Tractor-Trailer by
Number of Collisions in which Driver of Tractor-Trailer Killed

Type of Vehicle*	#Collisions	#Tractor-Trailer Drivers Killed
Tractor trailer**	7	4
Heavy single unit motor vehicle (e.g., dump truck, bus)	8	4
Van, pickup, or light or unclassified truck	11	0
Car or station wagon	97	6
Motorcycle	3	0
Total	126	14

*Table excludes 5 collisions with unoccupied tractor-trailers; the colliding vehicles were 1 motorcycle and 4 cars.

**When one tractor-trailer collided with another, survival status is indicated only for the driver of the first tractor-trailer listed on the police report.

collisions not known to have occurred on an up-grade, the tractor-trailer was the rear (striking) vehicle in 23 (74%). Table 3, which categorizes all the collisions in the study, shows that 82 (63%) of the multi-vehicle collisions involved configurations in which the tractor-trailer's braking ability may be especially likely to play a role.

A special category of problem involves a "bobtail" tractor, i.e., one traveling with no trailer attached. The bobtail, with no load, still has a braking system and other design aspects intended for a tractor pulling a loaded trailer. Absence of a trailer reduces the load on the rear tires and may adversely affect the bobtail's braking performance. Although not included in the defined study group, bobtail crashes were identified for the last year of the study (1973), in which there were 3 fatal crashes involving bobbails in addition to 26 involving tractors with trailers. One bobtail went through a red light, killing two persons in a car; another skidded out of control in the rain, killing three persons in an oncoming car; the third locked its wheels while braking to avoid a left-turning car and went down an embankment, killing the driver.

Table 2
Direction of Grade in Rear-end Collisions

Crash Configuration*	Direction of Grade				Total
	Up	Down	Not on Grade	Unknown	
Other vehicle struck back of tractor-trailer	7	1	4	3	15
Tractor-trailer struck back of other vehicle	1	2	11	10	24
Total	8	3	15**	13***	39

*Table excludes 3 rear-end collisions between tractor-trailers

**Includes 2 collisions at hillcrest

***Includes 6 collisions that occurred on a grade, direction unknown, and 7 for which it was not known whether on grade.

Jackknifing, a situation in which the tractor and trailer do not maintain their alignment, was noted on eleven reports. In four cases the jackknifing occurred prior to any impact and thus was an element in crash initiation; three of these four jackknifings followed braking on wet pavement.

Information on presence, weight, securement, or type of cargo was rarely included on the police reports. Such cargo characteristics may be important in crash initiation and consequences, and deserve detailed investigation. In at least two crashes in this study, cargo was apparently related to crash initiation. In one instance a tractor-trailer dropped a 5-gallon drum; the resulting crash involved a car and another tractor-trailer. In the second, a car hit a load of logs that extended beyond the rear of a left-turning trailer. In addition, two of the three trucks identified as tankers (carrying gasoline and hot asphalt, respectively) turned over while trying to negotiate a curve or a turn. We do not know whether these tankers were fully loaded; if not, dynamic surge of the liquid cargo (2) could have been involved. Ten of the 19 single vehicle crashes occurred at curves.

Precipitating factors included nine blowouts and four brake failures in tractor-trailers. At the time of the crash, three of these tractor-trailers were stopped because of the failures. Unspecified failures had disabled two other tractor-trailers; one was stopped in the roadway, the other had pulled off the road prior to the crash. Compared to these 15 failures in tractor-trailers, there were only two failures noted among other vehicles. Eleven collisions involved tractor-trailers parked on the shoulder; reports for two noted that the drivers were sleeping. Five of the parked tractor-trailers were unattended.

Table 3
Frequency of Various Types of Crashes

Crash Configuration	#Crashes
*Vehicles traveling in opposite direction	23
*Tractor-trailer overtaking other vehicle	24
*Tractor-trailer overtaking tractor-trailer	3
Other vehicle overtaking tractor-trailer	15
Tractor-trailer turning left or emerging from shoulder or side road	4
*Other vehicle turning left or emerging from shoulder or side road	27
Tractor-trailer going through red light	6
*Other vehicle going through red light	5
Tractor-trailer parked or blocking road	16
Other multi-vehicle crashes	8
Multi-vehicle crashes, total	131
Single-vehicle tractor-trailer crashes	19

*Types of crashes most likely to be reduced by improved braking ability of tractor-trailers.

Other vehicle-related factors, including speed, aerodynamics, maneuverability, and visibility, are probably important in the pre-crash period but could not be examined in the present study.

Crash-Phase Vehicle Factors

A major factor in determining whether people in other vehicles are injured or killed in any collision with a tractor-trailer is the relative mass of the two vehicles (the loaded weight of a tractor-trailer may be thirty or forty times

that of a car). In multi-vehicle collisions the tractor-trailer driver was rarely killed unless the other vehicle was also a tractor-trailer or heavy truck (Table 1). Fatal collisions involving a car and a tractor-trailer resulted in occupant death rates almost ten times as high in the car as in the tractor-trailer - 56% compared to 6% (Table 4). Furthermore, there were no cases in which a tractor-trailer occupant died following collision with a car, unless in addition to striking the car the tractor-trailer either overturned, went down an embankment, or struck an abutment, embankment, or bus.

Underride was mentioned in nine of the 101 collisions with cars or station wagons. Rear underride occurred in five cases; three of the five cars were Volkswagen sedans (Fig. 1). One of the four cars that underrode the side of a tractor-trailer was a VW sedan; the others were standard-sized sedans or station wagons. Of the 92 cars in collisions that did not involve underride, only six were Volkswagens, a proportion that differs significantly from their proportion in underride collisions ($\chi^2 = 9.3$, $p < 0.01$). Although the number of cases is small, the data suggest that 1) even though many tractor-trailers have rear-end "protectors" or "bumpers," these may be especially inadequate in collisions involving small cars and 2) side underride protection is needed for cars of all sizes.

At least 8 of the 41 deaths among occupants of tractor-trailers involved ejection. There was little reliable information on seat belt usage or availability.

The importance of cargo in the crash phase was illustrated by a tanker carrying gasoline that exploded and burned, after the tanker went through a guard-rail and down an embankment. Among the crash-phase factors that could not be investigated was cargo securement, which is sometimes a factor in injury to occupants of tractor-trailers, as is cargo weight in relation to the strength of the tractor and its capacity to manage the forces likely to be involved in a crash.

Post-Crash Vehicle Factors

Probably because of the magnitude of the forces in crashes involving heavy trucks, the frequency of post-crash fires (8% of crashes studied) was greater than for crashes in which tractor-trailers are not involved. (We estimate that roughly 2% of the motor vehicle occupant deaths in Maryland are related to crash fires.) Twelve crashes resulted in fires. Five of these were rear-end collisions in which another vehicle caught fire: in four, tractor-trailers struck the rear of vehicles with rear-located gas tanks; in the fifth, a sedan with a forward-located gas tank struck the rear of a tractor-trailer.

Extrication appeared to pose a special problem in the case of tractor-trailer occupants. At least eight of the 41 tractor occupants who died were trapped (other than by fire) for periods as long as 3½ hours. Such extrication delays often involved jammed doors, collapse and distortion of the cab, shifted loads, and/or tractor turnover.

SETTING STANDARDS: RECOMMENDATIONS

The findings described above point to a variety of factors related to the frequency and severity of crashes. Because the research was not conducted at the time the crashes occurred, many items of information were not consistently recorded; therefore the data provide only minimal estimates of the size of many problems. (Prospective studies could be of value in estimating the magnitude of

Table 4

Survival of Occupants in 101 Collisions between
Tractor-Trailers and Cars or Station Wagons

Type of Vehicle	#Died	#Survived	Total	%Died
Cars or Station Wagons	113	89	202	(56)
Tractor-Trailers	7	109	116	(6)
Total	120	198	318	(38)

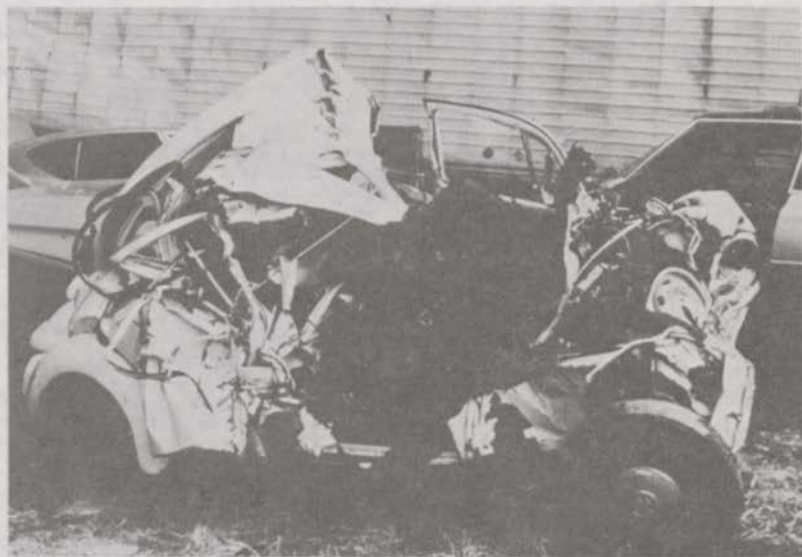


Figure 1. Volkswagen "beetle" that underrode rear of tractor trailer shown in Figure 2.

the effects suggested by the limited data available for this series of crashes.) Nevertheless, some vehicle factors of obvious importance in the present group of fatalities point to principles that should be considered in setting vehicle standards.

1. Standards are needed to ensure that trucks carrying heavy loads have adequate power to maintain speed in common situations. Five years ago, a standard was proposed that would have specified a minimum ratio of horsepower to gross vehicle weight rating. The standard was never put into effect, although the proposal stated that "a significant percentage of highway accidents are the result of speed differentials of moving vehicles, combined with the inability of some drivers to properly gauge the speed of slow-moving vehicles. The speed differential, especially on ascending grades, is due in large part to the lack of adequate engine capacity in relation to vehicle size" (3).
2. The mass of tractor-trailers, relative to passenger cars, makes their ability to stop especially important. Typically, cars can stop in a shorter distance than trucks; this discrepancy can precipitate crashes. Not uncommonly, their weight plus the disparity in braking ability causes heavy trucks to play prominent roles in chain reactions involving large numbers of vehicles (4). Other researchers have shown that in rear-end turnpike collisions, trucks are involved as the striking vehicle more than twice as often as expected (5). A recent air-brake standard (FMVSS 121) addresses the need for improved braking ability in heavy trucks such as tractor-trailers, reducing the stopping distance permitted at specified speeds. The standard is also designed to reduce the likelihood of jackknifing. A docket submission for this standard reports that many trucks travel with the front brakes deactivated (6), while others do not have front brakes (7). The effect of FMVSS 121 (which would require that substantial braking be done on the front axle) should be closely monitored not only for tractors pulling trailers but also for bobtails. It should be noted that the standard applies to empty and loaded trucks, certified to meet the requirements of their maximum gross vehicle weight rating only, and does not consider the fact that many trucks are overloaded.
3. Because of the interrelationship between gross truck weight and other factors, the National Transportation Safety Board has recommended that increases in permitted weights for trucks be "preceded by standards specifying a ratio of gross weight to net horsepower, minimum performance standards for brakes, and for coupling systems between components in a vehicle combination" (8). Contrary to popular belief that above certain truck weights the weight disparity between trucks and cars is of little consequence, the NHTSA has shown that as the weight of loaded trucks increased, the ratio of deaths to injuries in car-truck collisions increased substantially. This was especially true as truck weights increased above 60,000 pounds (9).

Of particular concern, because of the interrelationship between speed, weight, and braking ability, is one of the arguments set forth by the Federal Highway Administration in its support of legislation increasing permitted truck weights: namely, that the reduced speed limit (55 mph) would more than offset any possible increase in braking distance that might result from the legislation (8). In effect, this allows a new regulation to reduce the safety benefit achieved under another regulation. We believe that progress in one area should not be used to rationalize steps that could negate that very progress.

4. As long as trucks and cars use common roadways, the design of trucks, including tractor-trailers, should be based on the premise that collisions with cars will occur. Serious mismatch of colliding vehicles which localizes the forces rather than following basic principles of crash energy management (10) should be reduced. For example, trailer design should prevent rear and side underride by cars, because in an underride the initial collision forces are not applied to the bumper and adjacent structures but to portions of the car (such as the hood and windshield) that are closer to the occupants and not normally designed to absorb crash forces. Some existing trailers, such as those for transporting certain kinds of live-stock and furniture, illustrate that it is possible to design trailers so that space closer to the ground is utilized and underride is simultaneously prevented. Rear-end protectors, if they are to protect cars and their occupants, need to extend the entire width of the trailer and match automobile bumpers in height. (Present federal motor carrier safety regulations permit the lower edges of such protectors to be 30" from the ground.) Regulations should also specify the contours and width of the bars used for protectors. At present, a typical design uses narrow bars with squared-off edges and corners (Fig.2), rather than wide and rounded surfaces that could better distribute crash forces. A manufacturer's advertisement for such a "bumper" says: "And, being the most vulnerable item on any trailer, it can be easily replaced if damaged with a minimum cost." Although part of this vulnerability is associated with backing into loading platforms, it should also be noted that the rear-end protector is likely to be the contact point for any vehicle striking the truck from the rear; its design should reflect this fact.
5. Vehicle standards should address the need to make tractor cabs crash-worthy (Fig. 3), providing protection for the driver in the kinds of serious crashes that can reasonably be anticipated - for example, frontal crashes when carrying maximum loads. Practices of making tractors of lighter materials, and with "cab-over-engine" designs lacking frontal projections that could better absorb crash forces, are encouraged by current regulations that include the tractor in maximum length and weight limits. To discourage present tendencies to sacrifice the safety of occupants in the interest of greater pay-loads, limits for length and weight should be exclusive of the tractor (11).

Standards to protect truck occupants in crashes deserve special consideration because trucks have generally been exempted, either temporarily or permanently, from federal motor vehicle safety standards for occupant protection. For example, effective dates for federal standards for door latches and seat belt installation were set many years later for trucks than for passenger cars, and standards to minimize roof crush, side intrusion, and damage to occupants from impact with interior structures have been set only for passenger cars. It is essential that trucks not be similarly exempted from standards requiring passive protection such as airbags in passenger cars, when and if such standards become effective.

6. Tractor designs that facilitate escape and extrication are needed, as illustrated by the problems of entrapment and post-crash fires. Designs that reduce compartment collapse, increase likelihood that doors can be opened post-crash, and provide alternate escape routes should be considered; current interest in roof exits for passenger compartments of trains (12) have important implications for truck cabs, since occupant extrication from both types of vehicles is extremely difficult when they have overturned. At least one manufacturer has incorporated roof escape hatches into buses, despite the absence of a standard.

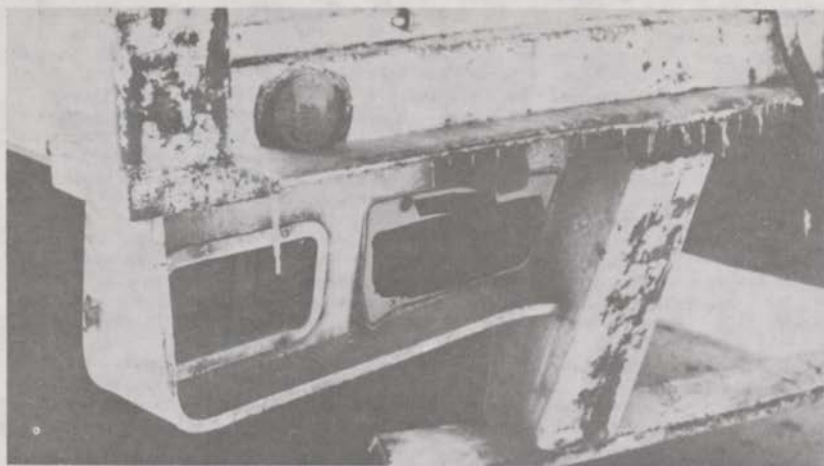


Figure 2. Rear-end protector on tractor-trailer struck by car shown in Figure 1.



Figure 3. Cab of tractor-trailer that rolled over going down a slight embankment

The problem of crashes involving heavy trucks should be addressed by attention to pre-crash, crash, and post-crash factors (1, 13). At present, motor vehicle designs and safety standards are not responsive to the fact that cars often collide with vehicles twenty to forty times as heavy. If the challenge of these crashes cannot be met through redesign of trucks and cars so they collide less often and with substantially less chance of death and injury, then it should be met through redesign of the transport system to eliminate the vehicular conflicts whose results are uncontrollable. Furthermore, if it is not possible to protect tractor-trailer occupants against the forces generated by crashes of their vehicles, then we should question the morality of legalizing loads too heavy to permit such protection.

MAKING DECISIONS: PROBLEMS WITH COST-BENEFIT APPROACH

Whether the solution to the problems discussed in this paper involves new vehicle standards, or reducing the size of payloads, or making major changes in our transportation system, the question of economics is bound to arise. And because so often cost-benefit analysis is used as a basis for decisions, we would like to mention three pitfalls that may be encountered in taking a cost-benefit approach to health problems.

First of all, the groups who pay the costs may not be the same as those who reap the benefits. For example, truck drivers who would benefit from the greater protection offered by improved truck designs do not pay the cost of those improvements unless they own their trucks.

Secondly, the initial cost of major improvements, such as better brake systems, is likely to appear excessive in relation to identifiable benefits. This is partly because large investments have already been committed to present vehicle designs and transport systems, producing a built-in bias in favor of the status quo. Short-range cost-benefit analysis therefore may not favor change - even when change would be of substantial benefit to society.

Thirdly, much of the health benefit that could result from change is not readily converted to dollars. Not only does this raise questions as to the appropriacy of cost-benefit analysis (14), but the conclusions suggested by a cost-benefit analysis may largely depend on the size of the arbitrary dollar value assigned to personal and social benefits. If people losing lives and limbs in crashes received financial settlements commensurate with those given to children damaged by thalidomide, there would be little question as to the economic payoff of many improvements that are needed in our vehicles and our transport system.

Perhaps it is time to revise our decision-making processes to take these considerations into account. Otherwise we may continue to pay, long into the future, for mistakes of the past.

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FIBCO INC.,
Douglaston, N.Y., August 6, 1975.

HON. LLOYD M. BENTSEN, JR.,
Chairman, the Transportation Subcommittee of the Committee on Public Works,
U.S. Senate, Washington, D.C.

DEAR SENATOR BENTSEN: I attended the recent session of the Senate Subcommittee on Transportation, Monday, July 28th, at which the major subject was highway safety. I found the proceedings to be very interesting and must compliment the Committee on its thoroughness.

I had come armed with a question which I wanted to pose for the Sub-Committees' consideration but the opportunity to present it did not arise. I would therefore like to address this question to you in this letter.

FIBCO, INC. markets the FITCH INERTIAL BARRIER, a passive on-highway device which cushions errant vehicle crashes, known as an impact attenuator.

There are approximately 4,500 to 5,000 impact attenuators currently installed on our highways. It is estimated that they have been impacted some 3,500 to 4,000 times. The savings of lives is estimated in the vicinity of 500 and the injuries prevented runs into the thousands. Property damage to the vehicles involved is so slight that approximately 85% of the impacting cars can be driven away from the scene of the accident under their own power.

Most on-highway safety devices are sacrificial in nature. I refer not only to impact attenuators but also such devices as break-away sign standards, guard-rails and other barriers. When these devices are impacted by out-of-control cars and perform their designed function of life saving and injury reduction, they are in part, or in whole, destroyed and are generally rendered useless until they are reconstituted.

It is the present Federal practice, under current laws, to pay the major part of the cost of the original installation of these sacrificial units but not to supply funds for the purchase of replacement parts to keep them in operating condition. This practice puts the burden of the continued revitalization costs on the states and is having a negative influence on their specification of further installations of these safety devices.

The unfortunate fact is, that the more often these units are impacted and the more lives saved and injuries prevented, the more it costs the states and adds to their reluctance to make additional installations. Thus, the basic purpose of this particular area of the Federal Highway safety effort is being thwarted.

Our question is . . .

Could language be included in the legislation presently being considered to provide for the inclusion of the necessary spare parts to keep these sacrificial units in operational condition for a period of time (five years, for example) as part of the Federal funding for the original installation.

If this can be done I assure you that the installation of these life saving, injury alleviating devices will increase dramatically almost at once.

If I can supply any further information Senator Bentsen, I am at your service.

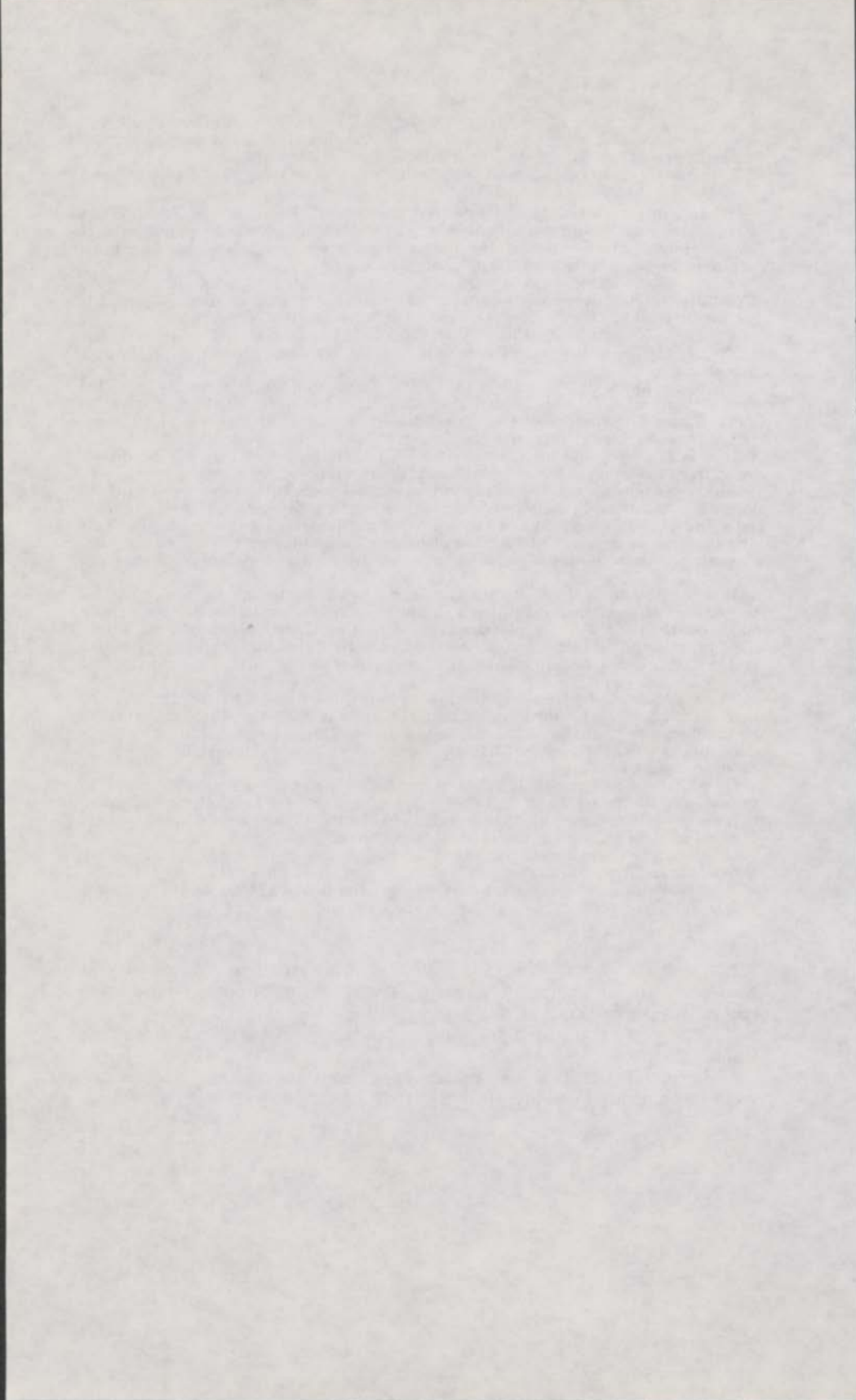
Sincerely yours,

C. C. WALTERS,
Senior Vice President.

Senator BENTSEN. We have a vote coming up. I apologize to you gentlemen for not being here earlier. I was at the Finance Committee where we are working on the energy bill.

Thank you very much for your attendance. We will recess at this time.

[Whereupon, at 11:50 a.m., the subcommittee recessed, to reconvene at 10 a.m., Tuesday, July 29, 1975.]



FUTURE OF THE HIGHWAY PROGRAM

PROCEDURAL REQUIREMENTS AFFECTING HIGHWAYS

TUESDAY, JULY 29, 1975

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 4200, Dirksen Senate Office Building, Hon. Quentin N. Burdick, presiding.

Present: Senators Burdick and Stafford.

Senator BURDICK. The subject of today's highway hearing is the Federal Procedural Requirements Affecting Highway Projects.

During this morning's session we will be exploring those matters: environmental, labor-related or safety-related, that cause delays in highway projects.

We are going to ask all of our witnesses to come to the table at the beginning and we will hear all statements before questioning the panel as a group.

The Chair will note that when there is a free interplay among panel members these meetings can be very useful. Because of our time limitations, we are going to hold our oral statements to 15 minutes each.

Therefore, if you have a longer statement, we will ask you to summarize it so we will have time for the more important question and answer period. Your full statement will be entered in the record.

Our first witness this morning will be Honorable Bob Hunter, Chief Engineer, Missouri State Highway Department. At the table will also be David Schoenbrod, Staff Attorney, National Resources Defense Council; James Nelson, president, American Road Builders Association; Less Lamm, Executive Director, Federal Highway Administration; and the panelists will be accompanied by Mr. Daniel Hanson, executive vice president, American Road Builders Association; and Patrick Parenteau, attorney, National Wildlife Federation.

You may proceed in your own manner.

STATEMENT OF ROBERT N. HUNTER, CHIEF ENGINEER, MISSOURI STATE HIGHWAY COMMISSION

Mr. HUNTER. Mr. Chairman, I am appearing before you today in my capacity as a member of the policy committee of the American Association of State Highway and Transportation Officials and as chairman of the Highway Subcommittee of AASHTO's Special Committee on a Continuing Federal Legislative Program.

We appreciate this opportunity to again discuss with you the causes of many delays in implementation of the Federal-aid highway programs—delays which we feel are not productive and are quite costly to both the Federal Government and State and local units of government. Not only do these delays cost dollars, particularly in times of high inflation, but also result in a loss of public confidence in Government's ability to respond to perceived needs.

In 1955, when the interstate program was first being proposed, the National Governors' Conference had gone on record as opposing any additional Federal aid since leadtimes on Federal-aid projects had grown to 2 years. Average leadtimes now are four times that amount.

As you have heard many times in the past few weeks, the complex Federal requirements are causing undue delays and increases in costs for federally assisted projects. We recognize the need for congressional guidance in the development of standards for federally assisted programs to provide safe and efficient Federal-aid highway systems and to promote other goals.

We submit, however, that the complex requirements now imposed on federally assisted projects do not promote these ends, and, indeed, are counterproductive because those requirements which are of significance are often subdued by minutiae which result in excessive delays and otherwise impede valid concerns for such purposes as safety or environmental protection.

As of April 1, 1975, the Federal Highway Administration had promulgated 346 pages of detailed regulations in the Code of Federal Regulations to implement title 23, which is 84 pages long, of the United States Code.

This compilation is only the beginning. These regulations are so detailed and inflexible as to cause potential legal problems arising from challenges for alleged failures to meet all these requirements or questions about the authority of the Secretary to waive any of the regulations retroactively.

State highway officials continue to be burdened by requirements for excessive Federal reviews and approvals at each stage of project development. Federal procedures for public hearings also create problems.

Separate hearings for corridor location and design approval are not necessary except, perhaps, in a few extraordinary occasions. The requirements of FHWA for public hearings are compounded when separate hearings may be required by other Federal agencies, such as the Corps of Engineers for the issuance of permits under section 404 of the Federal Water Pollution Control Act or the Coast Guard for issuance of permits for navigable stream crossings.

Some of the most troublesome procedural requirements are not imposed to meet the requirements of title 23, however, but are imposed to meet the requirements of other Federal laws.

It will come as no surprise to you to hear that procedural requirements for environmental clearances have caused severe difficulties. In response to an AASHTO survey last year, State officials reported that the processing time for environmental impact statements required by NEPA averaged approximately 1 year. These delays can be extended by litigation.

NEPA is not the only Federal law requiring environmental reviews, however. For instance, a project in navigable waters in a park area could be subject to at least 20 Federal statutory requirements for environmental reviews, including the following:

The National Environment Policy Act; sections 208, 401, 402, and 404 of the Federal Water Pollution Control Act; section 4(f) of the Department of Transportation Act; section 307(c)3 of the Coastal Zones Management Act; sections 9, 10, 11, 13, and 14 of the River and Harbor Act approved March 3, 1899; sections 103 and 302 of the Marine Protection Research and Sanctuaries Act of 1972; the Fish and Wildlife Act of 1956; the Migratory Marine Game-Fish Act; and the Fish and Wildlife Coordination Act; the Historic Preservation Act of 1966; and the Clean Air Act. Furthermore, section 109(h) of title 23 of the United States Code requires the development of an action plan for environmental reviews.

Another area of concern is over requirements which appear to be contradictory or cause unnecessary duplication. Review of indirect sources of air pollution provides such an example. Section 109(j) of title 23 of the United States Code requires the Secretary of Transportation, after consultation with the Environmental Protection Agency, to develop and promulgate guidelines to assure that highways constructed with Federal-aid assistance are consistent with any approved plan for the implementation of any ambient air quality standard for any air quality control region designated pursuant to the Clean Air Act.

The Secretary of Transportation has published those guidelines. Now separate guidelines are being developed by the Environmental Protection Agency pursuant to section 110 of the Clean Air Act for control of indirect sources of air pollution to insure maintenance of the same ambient air quality standards.

AASHTO has adopted policies recommending the clarification of environmental clearance processes to eliminate duplication of requirements, to make new requirements inapplicable to projects with prior design approval, to provide expeditious review by interested agencies, and to provide a cutoff date for judicial review.

We also have expressed concern to Secretary Simon, and have recommended procedural improvements we believe could be made. With your permission, we would like to submit copies of the policy statement and a letter of May 1, 1975, to Secretary Simon for the record of this hearing.

[The material referred to follows:]

AMERICAN ASSOCIATION OF STATE HIGHWAY
AND TRANSPORTATION OFFICIALS,
Washington, D.C., May 1, 1975.

Mr. WILLIAM SIMON,
Secretary of the Treasury,
Washington, D.C.

DEAR MR. SECRETARY: The American Association of State Highway and Transportation Officials is very pleased that you are working to improve the process of preparing Environmental Impact Statements by expediting their preparation and review.

It is our organization's hope that a reasonable time frame will be established, and that in case there is a need for resolving a dispute within the Federal Government, that a system that is both efficient and expeditious be developed.

In addition to your interest, we were pleased to learn of interest by members of Congress in procedural reforms which might make the National Environmental Policy Act more workable. As you know, Congressman Leggett, the Chairman of the House Subcommittee on Fisheries and Wildlife Conservation and the Environment, of the Committee on Merchant Marine and Fisheries, has stated that he plans to hold oversight hearings on the Act this summer.

State highway and transportation officials fully support the objectives of the protection of our environment. They are becoming increasingly frustrated, however, over procedural requirements that are causing unwarranted delays to necessary construction. They are particularly concerned when parties opposed to specific projects employ these procedures to delay, not to improve, proposed projects.

For instance, Alan Sagner, the New Jersey Commissioner of Transportation, recently testified before the House Public Works Committee about difficulties encountered in New Jersey with projects for which environmental impact statements had previously been approved, but had to be redone because requirements were changed after the statements had been approved, but before the projects were constructed.

This problem is particularly troublesome when environmental impact statements cover segments of highways beyond that portion which is to be constructed by a given project. For instance, an environmental impact statement might be approved for the entire length of a highway through an urban area and a portion may be completed initially. Completion of the remaining portions could be delayed if new environmental impact statements had to be approved.

It should be noted that it takes from 7 to 9 years, in many cases, to develop a major highway project. The status of projects begun prior to the passage of NEPA is a serious problem now for many States five years after the effective date of the law.

The Policy Committee of AASHTO recently adopted a policy strongly recommending that no Federal regulations or laws be made retroactive to any project which has received design approval from the Department of Transportation within three years prior to the effective date of the regulation.

Another area of concern is over requirements which appear to be contradictory or cause unnecessary duplication. Review of indirect sources of air pollution provides such an example. Section 109(j) of Title 23 of the U.S. Code requires the Secretary of Transportation, after consultation with the Environmental Protection Agency, to develop and promulgate guidelines to assure that highways constructed with Federal-aid assistance are consistent with any approved plan for the implementation of any ambient air quality standard for any air quality control region designated pursuant to the Clean Air Act, as amended. Guidelines have been published to meet those requirements. Separate guidelines are being developed by the Environmental Protection Agency, however, pursuant to Section 110 of the Clean Air Act, as amended, for control of indirect sources of air pollution to insure maintenance of the same ambient air quality standards.

State officials have urged that many delays could be avoided if review of environmental impact statements is accomplished in field offices of Federal agencies within a given geographic area of the project. Only projects of truly national significance should be reviewed at the national level.

State officials frequently complain about lack of specific standards for environmental planning which, if met, assure that environmental impact statements would not be subject to judicial challenge. These standards should be limited to matters of national concern. Too much effort in the preparation of environmental impact statements is often devoted to the accumulation of data for trivial matters, with neglect of significant matters of national interest.

These standards could give guidance on the subject matter and content to be included in a statement.

They also object to the fact that lawsuits may be brought to stop a project at practically any stage, even by parties who neglected opportunities to raise questions during the period of administrative preparation of environmental impact statements.

The AASHTO Policy Committee recently recommended that Federal law should be amended to provide a cut-off date after approval of the final environmental impact statement after which no suit may be brought to challenge such approval.

The scope of judicial review also concerns State officials. They believe that responsible administrative officials should make environmental evaluations and determine what weight should be given to environmental considerations in relation to other factors which might justify a project. They believe the courts should not substitute their judgment for that of responsible administrative officials, which should be overturned only if found to be arbitrary and capricious.

The State officials also believe that there should be more delegation of responsibilities to environmental assessments to State officials who are better equipped than Federal officials to evaluate projects.

One other area of concern centers on overlapping Federal requirements for the preparation of different statements regarding environmental matters. The AASHTO Policy Committee recently adopted a policy recommending that all Federal requirements for statements regarding environmental protection, including but not limited to, those imposed by the National Environmental Policy Act, section 4(f) of the Department of Transportation Act, the Clean Air Act, the National Historic Preservation Act, the Coastal Zones Management Act, should be included in one environmental impact statement for the U.S. Department of Transportation.

During 1974, construction costs were approximately 25% higher than they had been a year earlier. During that year, approximately 4,000 Federal-aid highway contracts, with a total cost of approximately \$5.2 billion, were awarded. Since environmental impact statements are now being required for projects involving approximately 70% of the dollar volume of such contracts, delays averaging one year for each of these projects could have increased costs by approximately \$1 billion. (This total does not include the cost of delays for preparing "negative declarations" to justify the lack of an environmental impact statement for other projects.)

The costs of environmental impact statements are a cause of major concern to State officials. The average cost of the preparation itself, estimated to be about \$25,000 a mile, is relatively modest, but increased construction costs caused by inflation during delays for environmental impact statements can be most significant. Attached is a table which summarized information reported by the Member Departments of AASHTO about the average time required to complete environmental impact statements, which in most States is approximately one year.

Again, we wish to express our deep appreciation of your interest in procedural problems arising from environmental requirements, and hope to work with you in efforts to make the program more workable.

Sincerely,

HENRIK E. STAFSETH,
Executive Director.

State	Leadtime on projects				Processing time of environmental impact and 4(f) statements, environmental	
	Interstate	Primary	Urban	Secondary	Impact	4(f) statements
Alabama	9 yr.	6½ yr.	8½ yr.	4½ yr.	7 to 12 mo.	3 to 24 mo.
Alaska	2 to 4 yr.	2 to 4 yr.	2 to 4 yr.	2 to 4 yr.	10 to 18 mo.	12 to 24 mo.
Arizona	4 to 8 yr.	4 to 8 yr.	4 to 8 yr.	4 to 8 yr.	12 to 14 mo.	20 to 26 mo.
Arkansas	6 yr.	2 to 6 yr.	2 to 6 yr.	1 to 3 yr.	9 to 12 mo.	
California	6 to 14 yr.	6 to 14 yr.	6 to 14 yr.	6 to 14 yr.	4 mo. (final).	12 mo. (final).
Colorado	2 yr.	5 mo. to 1 yr.	2 yr.	3 mo. to 2 yr.	6 mo. (final).	
Connecticut	8 to 11 yr.	5 to 7 yr.	3 to 10 yr.	3 to 4 yr.	20 mo.	38 mo.
Delaware	3+ yr.	3+ yr.	3+ yr.	3+ yr.	5 to 6 mo.	14 to 21 mo.
District of Columbia	7 to 10 yr.	2 to 4 yr.	2 to 4 yr.		24 mo.	
Florida	3½ yr.	3½ yr.	3½ yr.		11 mo.	15 mo.
Georgia	5 yr.	5 yr.	5 yr.	2 yr.		6 mo.
Hawaii	6 yr.	6 yr.	6 yr.	3 yr.	3 mo.	
Idaho	7 yr.	3 to 7 yr.	3 to 7 yr.	2 to 6 yr.		12 to 18 mo. (final).
Illinois	6 to 8 yr.	1½ to 8 yr.	½ to 2½ yr.	1 to 2 yr.		5 to 20 mo. (final).
Indiana	5 to 7 yr.	5 to 7 yr.	6 to 9 yr.	5 to 7 yr.	8 to 12 mo.	14 to 24 mo.
Iowa	8 yr.	8½ yr.	8½ yr.	3 yr.	11 mo.	
Kansas	5½ yr.	5½ yr.	5½ yr.	1½ to 2½ yr.	4 to 18 mo.	8 to 27 mo.
Kentucky	7 to 9 yr.	4½ to 6 yr.	5 to 8 yr.	3 to 4½ yr.	6 to 18 mo.	10 to 18 mo.
Louisiana						
Maine		5 yr.	7½ yr.		20 mo.	
Maryland	6 to 7 yr.	5 to 6 yr.	7 yr.	5 to 5½ yr.	11 to 19 mo.	

State	Leadtime on projects				Processing time of environmental impact and 4(f) statements, environmental	
	Interstate	Primary	Urban	Secondary	Impact	4(f) statements
Massachusetts	5 to 15 yr.	5 to 15 yr.	5 to 15 yr.	5 yr.		
Michigan	7½ to 8 yr.	5 to 8 yr.	1 to 8 yr.	4½ to 7½ yr.		
Minnesota	7 to 8 yr.	7 to 8 yr.	½ to 3 yr.	½ to 3 yr.	7 to 21 mo.	19 to 43 mo.
Mississippi	3 to 5½ yr.	3 to 5½ yr.	5 to 5½ yr.	3 to 5½ yr.	6 to 7 mo.	20 mo.
Missouri	5 to 7 yr.	5 yr.	5 to 7 yr.	3 to 5 yr.	11 to 29 mo.	23 to 53 mo.
Montana	8 yr.	6 yr.	5 to 7 yr.	4 yr.	24 mo.	
Nebraska	5 yr.	4 to 4½ yr.	5 to 6 yr.	3½ to 4 yr.	9 mo.	9 mo.
Nevada	3 to 10 yr.	3 to 5 yr.	3 to 5 yr.	2 to 3 yr.	18 to 24 mo.	
New Hampshire	4 to 6 yr.	4 to 6 yr.	2 to 6 yr.	4 to 6 yr.	7 to 12 mo.	
New Jersey						
New Mexico	4 to 9 yr.	3 to 7 yr.	3 to 9 yr.	3 to 7 yr.	9 to 12 mo.	
New York						
North Carolina	6 yr.	5 yr.	5 yr.	4 yr.	18 mo.	
North Dakota	6 to 10 yr.	4 to 6 yr.		3 to 5 yr.	4 to 6 mo.	
Ohio	8 to 10 yr.	4 to 9 yr.	4 to 9 yr.	3 to 8 yr.	(final).	12 mo.
Oklahoma					9 mo.	
Oregon	3 to 6 yr.	2 to 6 yr.	2 to 6 yr.	2 to 6 yr.		
Pennsylvania	9 to 12 yr.	7 to 10 yr.	9 to 12 yr.	7 to 10 yr.	20 mo.	
Puerto Rico	1 to 1½ yr.	1 to 1½ yr.	1 to 1½ yr.	1 to 1½ yr.	11 mo.	11 mo.
Rhode Island	2 to 6 yr.	1½ to 3 yr.	2 to 5 yr.	1½ to 2½ yr.	24 to 30 mo.	
South Carolina	3½ to 14 yr.	3 to 6 yr.	3 to 7 yr.	½ to 1 yr.	3 to 4 mo.	
South Dakota	4½ yr.	4 yr.	2½ yr.	3½ yr.	(final).	
Tennessee	5½ yr.	4½ yr.	5½ yr.	3 yr.	3 mo. (final).	
Texas	6½ to 7 yr.	6½ to 7 yr.	6½ to 7 yr.	6½ to 7 yr.	4 to 6 mo.	15 mo.
Utah	10 yr.	6 yr.	8 yr.	4 yr.	(final).	
Vermont	10 yr.	10 yr.	10 yr.	5 to 8 yr.	3 to 4 mo.	26 mo.
Virginia	4 yr 8 mo.	4 yr.	4 yr 3 mo.	4 yr 9 mo.	8 to 10 mo.	
Washington	6 yr.	4 yr.	1 to 6 yr.	2½ yr.	12 mo. (final).	
West Virginia	6 to 12 yr.	3 to 6 yr.	5 to 10 yr.	3 to 6 yr.	3 mo.	12 mo.
Wisconsin					4 to 5 mo.	
Wyoming	4 to 7 yr.	4 to 7 yr.	4 to 7 yr.	4 to 7 yr.		

CLARIFICATION OF ENVIRONMENTAL CLEARANCES PROCESS

State administrators are of the opinion that environmental considerations in Transportation programs must continue, as in the past, and be given proper emphasis.

However, they feel that guidance from Congress is needed to clarify NEPA, the Clean Air Act, Section 4(f) of the Transportation Act, and its modification in subsequent Federal-aid Highway Acts.

AASHTO endorses the expenditure of Transportation funds, in reasonable amounts to enhance and protect the environment, or protect the ecological balance, to protect parks and historical sites, to give adequate consideration to the socio-economic factors, to assure proper aesthetic treatments, and to incorporate sound conservation practices in the location, design, construction, maintenance and operation of Transportation facilities.

However, often demands are made in the name of such purposes and practices that vary widely from project to project and increase project expenditures substantially or even radically above what is required to provide the basic, functional and attractive facility.

It is strongly recommended that no Federal regulations or laws be made retroactive to any project which has received design approval from the Department of Transportation within three years prior to the effective date of regulation.

All Federal requirements for statements regarding environmental protection, including but not limited to, those imposed by the National Environmental Policy Act, section 4(f) of the Department of Transportation Act, the Clean Air Act, the National Historic Preservation Act, the Coastal Zones Management Act, should be included in one environmental impact statement for the U.S. Department of Transportation.

This statement should be circulated for expeditious review by interested agencies.

Federal law should be amended to provide a cut-off date after approval of the final environmental impact statement after which no suit may be brought to challenge such approval.

Mr. HUNTER. In addition to these environmental requirements, there are other Federal procedural requirements on matters such as labor standards, relocation assistance, civil rights, and provision of facilities for the physically handicapped, which we do not believe are helpful in accomplishing the purposes of the acts under which they were implemented.

For instance, we do not believe that the present regulations for detailed payroll reports are necessary to serve the purposes of the Davis-Bacon and Contract Work Hours and Safety Standards Act. Likewise, many of the requirements for reports and records for civil rights create paper instead of jobs for minorities.

Each highway department is required to make an expensive, time-consuming and costly study to locate replacement dwelling units on a 1 to 1 basis for every residential owner and tenant who is being displaced prior to the time the project can be authorized for acquisition.

In most instances, this is many months prior to the property being actually acquired. The housing list that was on the market at the time the relocation plan was made would obviously no longer be available; therefore, this plan proves nothing.

It is just a tool for the opposition to use to challenge a project in Federal court creating a legal trap which may delay the project several years or even sometimes permanently.

We must certify that no displacee will be required to vacate without adequate replacement housing; therefore, this plan serves no purpose.

We also would like to bring your attention to some proposed regulations regarding planning in urbanized areas which we believe would cause serious procedural difficulties and would exceed statutory authority.

In particular, we are concerned about proposals to place considerable authority for transportation policy and project selection with metropolitan planning organizations, which in many cases are A-95 clearing houses with no clear responsibility to elected local officials.

Furthermore, we are concerned about proposals to eliminate flexibility in programing projects by requiring rigid adherence to an annual program of projects which would be difficult to modify.

We believe that the myriad of Federal procedural requirements have been a major cause in delays encountered in the development of projects for the urban system. State officials will continue to assist local officials who are not familiar with all these requirements.

We believe that States are fully capable of constructing highway systems to meet basic standards for safety and efficiency and of fulfilling the purposes of congressional mandates in other areas such as labor standards, NEPA, and civil rights.

We think these ends could be accomplished by a workable certification acceptance procedure.

Unfortunately, the certification acceptance procedures, which Congress enacted in 1973, have not proven to be very helpful to the States because (1) they apply to requirements imposed by title 23 and not to other Federal requirements and (2) the administrative procedures required by the Federal Highway Administration for State laws and procedures at least equivalent to those contained in title 23, in the view of most State officials, have been more troublesome than current requirements for detailed Federal reviews.

In other words, we think the cure is worse than the ill. Only three States have elected to enter into certification assistance agreements acceptable to FHWA.

We suggest that a workable certification procedure should cover all Federal requirements and should be satisfied if responsible State officials certify that the purposes and substantive requirements of Federal laws have been met.

This concludes my statement, Mr. Chairman, and I appreciate the opportunity to participate.

Senator BURDICK. Thank you for your contribution this morning. We will go to questions after the other panel members have testified.

The next witness—have you arranged among yourselves—David Schoenbrod?

STATEMENT OF DAVID SCHOENBROD, NATURAL RESOURCES DEFENSE COUNCIL

Mr. SCHOENBROD. Yes, Mr. Chairman. I am a staff attorney with the National Resources Defense Council, a public interest environmental law firm.

My remarks will be directed towards those procedural requirements related to environmental protection under the National Environmental Policy Act and section 134 of the Federal Highway Act.

I will discuss both FHWA's implementation of existing law, the adequacy of that law, and the administration's bill. In both regards, I will be looking at the joint issues of insuring an adequate environmental review and avoiding delay.

First I want to say something about this word "delay." Building highways requires a lot of work. Some of it has to do with designing them properly. Some of it has to do with environmental protection. Some of this work is called "delay."

The choice of the word "delay" has to do with the work that people who are responsible for building highways would just as soon not do because it calls into the question of the desirability of building a particular highway as opposed to serving transportation needs in another way.

Because environmental review is so often considered as delay and therefore inessential, it tends to be done towards the end of the process of putting together a package for a highway where it then becomes a post-hoc rationalization, rather than an integral part of deciding what type of project would appropriately serve an area's needs.

Accordingly, it doesn't serve its core function. There is a potential for delay because the consideration under NEPA of the desirability of building a highway at all comes at the end of the process, whereas, in fact, that decision to build is now made in the administrative process right at the beginning.

We could see that on this chart which another witness had kindly offered us here. At the very beginning of this lengthy process, there is a basic decision made about whether or not to build a highway.

Much work is done as the process continues and it is not until 3 years into the process that the decision is even made as to whether or not to do an environmental impact statement. At the very end of the

process on a few infrequent occasions, questions arise from the public as to whether the road should be built. That decision was made all the way at the beginning.

I would like to turn to NEPA. This environmental review process applies to less than 10 percent of the roads that are built under the Federal Highway Aid program.

Very few delays have resulted even as to the projects that have been susceptible to environmental delay. Those delays have taken place because the environmentalists have succeeded in meeting a very difficult burden of convincing a Federal judge that the violation of the laws were so egregious that action by the Federal court was necessary.

There have been very few occasions of this. These come on three kinds of grounds: First, that the environmental review process is started late; secondly, that the environmental review process is applied to a very small section of the road, a few miles, whereas the project as a whole may encompass several hundred miles; third, because the quality of the environmental impact statement has been so poor. I base this assertion upon statistics put together by the Environmental Protection Agency and the review by the Center for Science in the Public Interest.

Very often the impact statements are done on a cookbook basis, where one project in one State is described in the same kind of words as a project in another State. This is not meaningful and thoughtful environmental review.

The answer to the problem is for FHWA to meaningfully try to implement the requirements for environmental assessment. Instead, the administration's bill will go just in the opposite direction.

It will attempt to gut NEPA by taking environmental review responsibility entirely away from the Federal officials and putting it in the hands of the States. This presents a practical problem for two reasons.

Institutionally, the State assessment is done by highway builders. Legally, these agencies are charged to build roads and some occasions there are direct legislative mandates to build particular roads.

Second, when the environmental review is done by agencies in this type of position, the environmental review will tend to be self-serving and Federal courts have so held.

Our belief is that such a change in the process would totally undermine NEPA as it applies to highways under a multi-billion dollar Federal program that changes the whole surface of the life in this country.

I find this administration proposal particularly incredible since Congress has just gone through a major assessment of the joint Federal-State responsibility as to the preparation of the environmental impact statements in S. 3130, which just came out of conference.

I don't think there was a need for a further reassessment of the process.

Lastly, I would like to turn to section 134 of the Federal Highway Act, which has to do with comprehensive continuous planning on a regional basis.

This is an important process apart from the process for considering individual projects because if the whole transportation design for a region emphasizes highways, then the choice is not really open as to a particular segment of that transportation, as to whether it should be highway or mass transportation.

The type of issue which is really at stake in this section 134 process is what the future of the region will be, what will it look like in the future, will it sprawl out or will it be in a pattern which is amenable to mass transportation?

The Federal investment moneys as to this choice have vast consequences for the future of this country. The choice has to do with the ability to meet air standards. It has to do very greatly with how much energy we use. It has to do with housing costs. It has to do with racial and economic segregation.

In my written testimony I set out in great detail the reasons why I believe the section 134 process has been a total failure. I have done this on the basis of the two studies; one done by the Legislative Commission of the State of New York, and another done by the Regional Plan Association. Both studies are of the Tri-State Regional Planning Commission, which is the three-C agency for the New York metropolitan area.

Basically, what these studies tend to show is as follows: In terms of assessing the overall future of the region, the regional plans that are required are very vague.

The staff members of the Commission themselves find that there is no real basis to evaluate a particular project since the plans are so vague.

The other aspect of it is the link between these very vague plans and the specific highway plans is circular. Land-use projections are made on the basis that highways will be built predominantly in the future.

Then, given such land-use projections, it is inevitable that highways will best serve just such a land-use pattern.

This process could go on and on forever. It has been going on continuously in this country, so that over the last 20 years we have doubled the metropolitan sprawl and the RPA, the Regional Plan Association, projects a further tripling over the next half century.

The amount of everything, including gasoline, required to move people around such a region goes up enormously.

The reason that the process has been such a failure is because FHWA has taken the attitude that as long as the regional planning process under section 134 has the papers with the right titles on it, sent to the right mailing list, it is OK.

They say we aren't responsible for what is going on in the region. I find this an ironical position since Federal money at the time is being earmarked in such large amounts for highway building that it doesn't really leave open to local choice what type of transportation will best serve the needs of the region.

There is some recognition that there is a shortfall in section 134 of the administration bill. But I think the administration bill is deficient in four major respects. First of all, for the first time it asks for attention to the question of energy usage implicated in what type of plans are to be followed.

I think that the bill is deficient because there also should be attention to air quality, to housing costs, segregation, and other implications of these regional transportation plans.

Second, the bill asks for the Secretary of Transportation to look at alternatives. This is to be on a national basis. There is a need on a regional basis to look at alternatives. Highway-dominant alternatives as opposed to mass transportation alternatives, sprawl alternatives as opposed to a rational-type of alternative.

There is no mandate for this and no mandate for hearings at the regional level for considering these issues.

Third, there is no requirement that the plans be precise. As we found in Tri-State the plans have been so vague there is no real way to meaningfully compare individual projects with these plans.

Fourth, I think the type of review process that is now under section 109 to require consistency between clean air plans and transportation plans should be made an explicit part of section 134 to insure that the transportation plans actually work for clean air as opposed to the present situation where they work against it.

That will conclude my comments.

[Mr. Schoenbrod's prepared statement follows:]

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Testimony Of The

NATURAL RESOURCES DEFENSE COUNCIL

Before The

SENATE TRANSPORTATION SUBCOMMITTEE

Of The

SENATE COMMITTEE ON PUBLIC WORKS

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July 29, 1975

This statement is made on behalf of the Natural Resources Defense Council, Inc. (NRDC). NRDC has been requested to appear and present testimony to the Transportation Subcommittee of the Senate Public Works Committee in its hearings on "The Future of the Highway Program." NRDC is a national non-profit environmental law organization which has been involved in many cases interpreting the National Environmental Policy Act (NEPA) as applied to transportation programs both in the highway and rail areas. (A fuller description of NRDC's activities is appended to this statement). NRDC has also been active in promoting the transportation control strategies of state implementation plans under the Clean Air Act to assure attainment and maintenance of air quality standards. Because of these involvements, NRDC is well qualified to address issues relevant to this hearing, namely the adequacy of existing regulations to carry out the intent of environmental legislation, the adequacy of the legislation itself, and the means by which the transportation planning and approval process may be made to function more efficiently and still be consistent with environmental goals. This statement will address these issues particularly as they relate to provisions of the National Environmental Policy Act (NEPA), Section 4(f) of the Department of Transportation Act, and Sections 134 and 109(j) of Title 23 of the U. S. Code.

The National Environmental Policy Act

This section deals with the inadequacy of the Federal Highway Administration's (FHWA) implementation of NEPA, the associated delays such resistance has produced, and the means by which the planning and approval process may be made more efficient and expeditious consistent with environmental goals.

The National Environmental Policy Act, which is the bedrock of federal environmental law and regulation, necessarily requires that time be taken in order to comply with its mandate of rational decision-making. The importance of requiring thoughtful consideration of environmental values cannot be denied. In fact, it is not thoughtful consideration of environmental issues, but FHWA's resistance to such consideration. First, it should be pointed out that with respect to most highways the NEPA review is not extensive: EIS' are prepared on less than ten percent of federal-aid highway projects. (Figures from the Council on Environmental Quality). Moreover, delays that are attributable to NEPA review can be traced directly to the following: 1) the fact that environmental review is undertaken far into the highway planning process, thus turning the review into a rationalization for a

decision already made rather than a meaningful part of the planning and design of the highway; 2) the fact that NEPA review typically occurs on small segments of road, rather than larger segments; and 3) the FHWA's absolute failure to meaningfully implement NEPA with a resulting low quality of Environmental Impact Statement. Litigation which has taken place with respect to highways, has related primarily to these breaches of NEPA. Therefore, it is FHWA's failure to responsibly implement NEPA, rather than NEPA itself, which has affected delays on highway projects.

The first real problem in FHWA's implementation of NEPA is that the environmental review is superimposed towards the end of the highway planning process. Pursuant to FHWA regulations* the environmental review is carried out just before location approval which is obtained several years into the planning process. Environmental review at that point, when commitments of time and planning money have already occurred and the general corridor already selected, does not allow for the real consideration of alternatives. By that point, a state is far along in its commitment to a particular project in a particular location. Per force, therefore, environmental statements at such a point deal with the question of whether "this is the best location and/or design," not "should this road be built at all," as NEPA requires. To alleviate this situation, the environmental review should be undertaken at the systems planning stage at which time regional transportation needs are assessed and transportation corridors identified. This would mean that an EIS would have to be prepared before a specific highway project is added to a specific system. Consideration of environmental issues at this stage would assure that environmental analysis was undertaken before any significant amount of money has been spent on engineering and other studies; and, most importantly, would allow the EIS to play the role for which it was designed: i.e., to be a major factor in shaping the decisions on federal-aid highways.

Another serious way in which NEPA is undercut by present practice relates to the preparation of EIS' on small sections of road. This is a direct result of the highway funding system and

* On December 2, 1974, the Department of Transportation published (39 Fed. Reg. 41804-41821) environmental procedures replacing PPM/90-1, but retaining the same essential features. They will be codified at 23 C.F.R. Part 771. Section 771.5(b) requires that the negative declaration or EIS and Section 4(f) statements shall be completed during the location stage, prior to the selection of a particular location.

would change with an accompanying change in that system. The reason for such piecemeal analysis is that the apportionments of federal-aid highway funds are calculated in lump sums for each of the categories of federal-aid highways within a state. At the time of apportionment, the funds are not designated for use in relation to any particular highway. Whenever the state receives the necessary program approval of a project, FHWA transfers the federal share of that project's cost from the state's "unprogrammed balance" account to an "approved program balance" account, and these funds are considered to be available for obligation by the state only on that project. Because states do not wish to restrict their use of federal-aid highway funds in this way, they tend to submit many small projects for FHWA approval.

While FHWA's regulations (23 C.F.R. §771.5(a)) call for environmental review of highway sections which are as long as practicable to permit consideration of environmental matters on a broad scope, this requirement has not been persuasive in compelling state highway agencies to plan highways on a broader scope:

Most Federal and state officials have been accustomed to thinking of the federal-aid highway 'projects' as small, incremental steps in achieving larger plans. They have not been noticeably anxious to submit the states' larger plans to what they commonly regard as uninformed public criticism and unnecessary reevaluation. In addition, most state officials consider it their overriding responsibility to spend the maximum amount of federal-aid highway funds available. The states' current highway work schedules are therefore carefully synchronized with the FHWA's funding mechanisms.*

The method for earmarking of federal funds should be readjusted so as to encourage planning and submission for approval of broader segments. This is because the present segmented approach to planning and environmental review is time-consuming and

* See R. Peterson & R. Kennan, The Federal-Aid Highway Program: Administrative Procedures & Judicial Interpretation, 2 Environmental Law Reporter 50001, 50004-50005 (April 1972).

** Id. at 50005.

violates NEPA's goals of encouraging comprehensive review and consideration of alternatives.

The Council on Environmental Quality has pointed out in its Fifth Annual Report that the number of EIS' prepared by DOT has decreased over the years. CEQ attributes this trend in part to the consolidation of numerous small highway statements into fewer, but broader, statements. (p. 389) Thus, broader-scope EIS' further the goal of expedition.

Comprehensive EIS' also further NEPA's goal of requiring evaluation of a broad range of alternatives. An EIS on the eventual construction of a 200-mile expressway involves the assessment of a broad range of alternatives such as rail transportation through the same region while an EIS on a 20-mile segment of road would never pose such issues.

Finally, another critical aspect of FHWA's resistance to meaningful implementation of NEPA is the poor quality of EIS'. Between November, 1971 and the end of April, 1973, EPA, in its review of highway EIS' pursuant to NEPA, found that 35 - 45 percent of the statements did not provide enough information to enable a decision to be made in the environmental impact of the proposed highway project.* In an assessment of 76 environmental impact statements undertaken by the Center for Science in the Public Interest,** it was found that one-third of the statements asserted without qualification that all highways increased the health and safety of the general public; about 30 percent denied "any adverse effect whatsoever"; and, while 91 percent affirmed the long-term benefits from highway construction, only 4 percent provided data to substantiate that claim. Further, 13 percent failed to mention air pollution, 34 percent did not consider the issue of community disruption, 54 percent did not consider the impact on nearby property values, and 33 percent did not look at the alternative of not building the project.

Indicative of the lack of independent evaluation uncovered by the assessment was the copying of statements word-for-word for different highway projects. Thus identical phrases, paragraphs, and even pages from impact statements for different

* See Sullivan & Farber, NEPA: Getting Citizens Into the Act, Environmental Action Bulletin (September 1, 1973).

** NEPA v. The Highway Trust, Environmental Action Bulletin (August 18, 1973).

urban highways appeared in widely disparate parts of the country. Highway engineers in St. Louis, Missouri, for instance, described the positive public attitude toward their projected highway in the identical words used by their engineering counterparts in Omaha, Nebraska. Much of the blame for inadequate impact statements is the way in which responsibility for transportation impact statements has been delegated. State highway departments delegate EIS preparation to staff members trained primarily as engineers, and not as social and environmental scientists, the self-serving and project-oriented results being obvious.

In conclusion, it is our opinion that federal implementation of NEPA in the transportation field, and particularly with reference to the construction of highways, has failed to comply with the requirements of NEPA in terms of the timing, scope and quality of EIS preparation. Furthermore, we believe that compliance with NEPA will expedite, rather than delay the application approval process.

Before moving to the final topic of discussion -- the provision of the Administration's bill relating to NEPA and 4(f) -- there are two additional points that should be made. One is that, the present planning process results in an inflexible commitment to particular highway projects far in advance of construction. As a result, changes in traffic trends, automotive use, fuel costs and other critical factors are not adequately accounted for. Second, techniques must be developed for updating traffic projections at a faster rate. At the present time, roads are being built based on traffic projections made 10 or more years ago.

Certification Acceptance

Section 113 of the Administration's highway bill proposes to discharge the Secretary of Transportation from all his responsibilities under NEPA, except with respect to the Interstate System, by allowing him to accept a certification from the Governor of any state of performance of responsibilities, including those under NEPA and 4(f), contingent upon the Secretary's finding that the responsibilities will be carried out in accordance with NEPA and 4(f). Once the certification is accepted, the Governor becomes the "responsible official" under NEPA and the "Secretary" pursuant to 4(f). This proposal is anathema to the

basic policies and goals of NEPA and represents an undermining of NEPA as applied to the largest single public works program in the country. A major change in the manner in which NEPA is implemented in the highway arena constitutes a major change in the scope and thrust of the Act. As such, the Administrator's proposal should be referred to the Congressional committees originally responsible for NEPA, namely the Senate Interior Committee and the House Merchant Marine & Fisheries Committee.

We are inalterably opposed to the process of certification acceptance. Complete delegation of EIS preparation and accountability would undercut effective and meaningful NEPA review and would mean that the FHWA approvals, required by statute, and the accompanying expenditure of billions of federal dollars, would be made without any environmental analysis and review by the federal decision-maker. Analysis and review of the EIS by the federal decision-maker is the only way to "... ensure that each agency decision-maker has before him and takes into proper account all possible approaches to a particular project ..."

Calvert Cliffs' Coordinating Committee v. AEC, 449 F.2d 1109, 1114 (D.C. 1971), cert. denied, 404 U.S. 942 (1972). It is the only way in which the Federal agency itself can "give serious weight to environmental factors in making discretionary choices."

Monroe County Conservation Council v. Volpe, 472 F.2d 693, 697 (2d Cir. 1972). NEPA places upon the Federal agency, not the contestants of license applications, the burden of representing the public interest in the environment. That is exactly where the burden should rest when massive amounts of federal dollars and important decisions are at stake. Moreover, the potential that without federal review, a state-prepared EIS will reflect "self-serving assumptions" exists by virtue of the fact that it is a state highway department's function to build highways. This potential for bias is vastly increased where the state highway department is charged with a legislative mandate to construct the particular highway segment at issue. (The New York and Vermont DOT's function pursuant to such legislative mandates). Complete delegation of responsibility of preparation of the EIS is thus boldly contrary to the purposes of NEPA which are to ensure objective, rational decision-making. Complete delegation of NEPA and 4(f) responsibilities to the state is equivalent to an effective repeal of environmental legislation as applied to the federal-aid highway program. We cannot believe that this, or any other Committee of Congress, would countenance such a repeal.

Sections 134 and 109(j)

Section 134 seeks to ensure that specific projects are carried out only in accordance with a comprehensive regional plan "embracing various modes of transport in a manner that will serve the States and local communities efficiently and effectively. There is considerable disparity between this objective and actual performance. As with its implementation of NEPA, FHWA has demonstrated a singular recalcitrance towards intelligent review of highway building.

I want to document this allegation by reference to the Tri-State Regional Planning Commission, the 3-C agency for the metropolitan New York area. Tri-State provides a good example because it serves a tenth of the nation's population and because it has been the subject of two separate, recent studies by organizations with reputations for careful analysis -- the New York Legislative Commission on Expenditure Review* and the Regional Plan Association.** Both studies are lengthy, copiously documented, and highly critical of Tri-State. The findings indicate that Tri-State comes nowhere near meeting the goals of section 134.

The Regional Plan Association (RPA)'s study was based upon interviews of present and former Tri-State Commissioners and staff as well as public officials. According to RPA, "very few felt that [Tri-State was] meeting the needs of the Region." RPA study at 4. Major deficiencies noted included ensuring proximity of jobs and housing and financing public transportation.

As required by section 134, the core of the effort to attain such goals must be a regional plan. Yet, RPA found that

"Many of the 1968 Commission members interviewed did not even remember approving Tri-State's basic policy statement, the Regional Development Guide; one who remembered called it 'superficial.'" Id. at 5.

Similarly, the Legislative Commission has found that Tri-State's approach is so vague that it:

"does not provide an adequate framework for implementation, or even understanding the

* "Tri-State Regional Planning Commission Programs (May 5, 1975) (hereinafter "Legislative Commission.")

** "Implementing Regional Planning in the Tri-State New York Region" (April, 1975)(hereinafter "RPA study")

regional implications of federal, State, regional, county and local physical development proposals." Legislative Commission at S-3.

While the Legislative Commission finds that Tri-State is less vague in the case of transportation projects, even in this area, it avoids "direct assessment of the implications of many of the most regionally significant projects." Id. Also see RPA study at 4. Even its vague conclusions are subject to "limited distribution policies," which the Legislative Commission found "inconsistent with the intent to provide regional guidance." Id. at S-5; RPA study at 4.

There are knowledgeable public officials in the region who do not know of Tri-State's existence." Legislative Commission at S-5.

The Legislative Commission found that Tri-State served only one basic function -- to qualify the region for federal money. Id. at S-5. Yet:

"Tri-State's compliance with these federal requirements has produced results that are only nominal...." Id. at S-6.

Nonetheless, FHWA has certified Tri-State as complying with section 134 for year after year. Moreover, specific project funding requires consistency with plans cooperatively developed by the States and local communities. The Legislative Commission found while individual counties and Tri-State have not reached agreement on even the vague plans, in no case has this had any consequences for federal funding. Id. at S-6. A finding of consistency is, in any event, hollow, since, as already noted, Tri-State's plans are so vague as to allow almost any project to be consistent. As RPA noted:

"Many Tri-State staff members ... feel that Tri-State's approval policies are not refined enough to serve as a basis for A-95 review." Id. at 6.

Tri-State is not an isolated example. For instance, WRDC has found that the capital area's Transportation Planning Board (TRB) has done its transportation planning based upon land use projections that assume a heavy emphasis on highway building. It is no wonder that it finds that highways are the best means of serving such a settlement pattern. Although the circularity

of this reasoning has been repeatedly called to TRB's attention, it has persisted in its self-fulfilling prophecy for highway building, sprawl, energy waste, and added air pollution.

This type of work is certified by DOT because it is, in fact, concerned only with the appearance of planning. To satisfy section 134 in FHWA's view, it is enough to have pieces of paper with appropriate titles being circulated to proper sounding mailing lists. There is no concern for requiring the regions to consider alternate transportation - land use patterns, to assess their implications, and to make a rational choice. Instead, section 134 serves as a polite way to divide up the federal bucks in each region and to avoid the obvious embarrassment of roads not meeting at political boundaries.

Yet, as the original motivation of section 134 reflects, much more is at stake. The massive expenditure of federal money on transportation and other facilities has a region-shaping effect. Roads and sewers are no less separable from land use planning than are blood and lymph separable from muscles and bones. In fact, federal transportation money has been spent in a way that encourages low-density land use, with metropolitan areas spreading out to cover huge land areas. Regional Plan Association, "Growth and Settlement in the U.S." at 5 (June, 1975). From 1950 to 1970, this sprawl grew from 18 million to 35 million acres. *Id.* at 10. RPA emphasizes that, if present trends continue, this sprawl will triple in size from 1970 to 2020. The costs of this sprawl, instigated in major part by federal spending, have been tremendous and will be even greater. Such sprawl:

"requires not merely more travel but 'more of everything' -- more pavement and utility lines per capita, more appliances per capita, more electricity per capita and also creates segregation and severe social strains because in a society where income is unequally distributed, the high consumption pattern of suburban living cannot be enjoyed by all."
Id. at 3.

A report recently prepared for the Council on Environmental Quality concludes that sprawl also significantly increases energy usage, air pollution, and the economic costs of providing housing. Real Estate Research Corp., "The Costs of Sprawl" (Exec. Summary, April, 1974).

The existence of section 134 evidences that Congress did not wish to remain so blissfully ignorant of such implications of the highway program and wanted regions to evaluate these implications intelligently. The empty implementation of section 134 now raises the question of whether Congress will be satisfied with nothing but appearances.

The Administration's rewriting of section 134 recognizes that this section needs strengthening, but it is woefully inadequate. First, it adds energy to the list of concerns. This addition makes blatant the omission of air pollution, housing costs, segregation, consumption of land and water, and the other implications of an emphasis on highway building. These concerns deserve emphasis along with energy.

Second, the Secretary is asked periodically to consider alternatives to the present approach to transportation. There is nothing wrong with this in itself, but it is far more important that alternatives to highway-dominated low density development be considered in the regions, where the people are. The bill is deficient because it does not mandate consideration of such alternatives and their implications as part of the continuous comprehensive planning process.

Such consideration is essential if the people in each area are to choose the transportation and land use patterns they want, not those dictated by bureaucracies and road-builders. To this extent, the bill is defective in not requiring that such planning be the subject of periodic public hearings held throughout the region, where the public is assisted by the existence of an independent office of public counsel.

Third, the Administration bill is defective by not requiring that the plans be sufficiently precise to determine what type of projects are included and which are excluded. Moreover, the bill falls short by failing to require a detailed explanation of why the plan chosen by the region conforms to the objectives of the Act.*

Fourth, the Administration bill is deficient because it does not require consistency between the regional transportation - land use plan and state implementation plans under the Clean Air Act. Section 109(j) requires consistency between such clean air plans and particular projects. But, this is not enough since there is much more flexibility to achieve air goals when one is

* In addition, the redefinition of "urbanized area," gives the Secretary, in effect, unbridled discretion to excuse some urban areas from the operation of section 134. This should not be allowed.

considering more than one project. Moreover, section 109(j) is negative, only forbidding inconsistent projects, while attaining air goals may require encouraging the building of new mass transportation.

The determination of consistency should be made by the EPA Administrator. Ideally, the entire planning function should be carried out by a body separate from the builders, as even former Tri-State Commissioners have suggested. RPA study at 6. This would be much like the separation of the regulatory and development functions of the AEC. Our proposal here is far more limited -- not to give EPA supervision over the planning, only over the consistency of that planning with clean air goals with which EPA is charged with achieving. Nonetheless, the involvement of an agency other than DOT may provide some spur to overcome the past dismal implementation of section 134.

I realize that our procedural suggestions are far-reaching. They are necessarily so since they have the intent of bringing to light and examining the substantive implications of the federal highway program. Such examination, I hope and believe, will have substantive implications of its own.

Conclusion

President Ford's message accompanying the proposed Administration bill sounds strangely like the 1950's when he talks about the highway program as an unmixed blessing. Surely the voters have learned since the nineteen fifties that the freedom to travel promised by the highway program has brought also the coercion to travel only by car, the coercion to run the risk of being among the many killed and injured each year on the highways, the coercion to pay one-quarter of the Gross National Product for highway transportation, the coercion to pay higher energy bills, and the coercion to breathe foul air.

People are no longer willing to pay these costs. The Highway Trust Fund is no longer sacrosanct. Highway bond issues have been defeated. The reaction against single-minded devotion to the automobile is apparent not only in this country but in developed countries around the world. An OECD survey of 300 cities found that a surprisingly large number already restrict

automobile use in the urban core."Better Towns With Less Traffic (Paris, April, 1975). For instance, 88% restrict parking, 59% have pedestrian zones, and 49% have express bus lanes. Many more measures are planned and the rates of use are higher in the most developed countries.

That resistance to the automobile has already grown so large is amazing, given that the highway program has been implemented in a way that does not produce information as to the program's actual costs in comparison to the alternatives. The Administration bill would compound this problem both as to NEPA and section 134.

The information learned from better procedures will improve the program, lessen delay, and ultimately bring to legislators a yet stronger message as to how federal money should be allocated between automotive and other forms of transportation.

Addendum

The Natural Resources Defense Council is a national non-profit environmental law organization, incorporated and existing under the laws of the State of New York, with its principal office at 15 West 44th Street, New York, NY 10036. NRDC also has offices at 917 15th Street, N.W., Washington, D.C. 20005, and at 664 Hamilton Avenue, Palo Alto, California 94301. NRDC seeks to promote its goals of environmental protection and natural resource preservation through monitoring the compliance of federal agencies with environmental protection laws and through legal action in test cases of national significance.

NRDC has nationally over 15,000 members. Major involvements have been in the areas of air pollution, water pollution, nuclear safety, noise, mass transit, National Forest management, strip mining and stream channelization.

Senator BURDICK. Our next witness will be James Nelson, president, American Road Builders' Association.

STATEMENT OF JAMES A. NELSON, PRESIDENT, AMERICAN ROAD BUILDERS' ASSOCIATION

Mr. NELSON. Thank you, Mr. Chairman. My name is James A. Nelson. I am vice president and general manager of E. D. Etnyre & Co. of Oregon, Ill. I am here today in my capacity as president of the American Road Builders' Association. We sincerely appreciate this opportunity to discuss with the subcommittee some of the Federal procedural requirements currently affecting highway projects. These procedural requirements take several forms:

1. The Federal Highway Administration has the responsibility of issuing regulations which are necessary to insure that highway projects are constructed in accordance with title 23, United States Code. Generally speaking, these requirements are an assurance that the Federal investment in the highway program is utilized soundly and in the manner intended by Congress.

2. The environmental impact statement brings together an extensive number of checks and balances—some involving lengthy investigations. These requirements insure that the highway project will be built in a manner most compatible with our national goals in the field of environmental quality. Certain specifics are written into the law; for example, the section 4(f) prohibition against unnecessary intrusion into parkland.

3. Numerous laws and regulations are intended to protect employees. These include occupational safety and health regulations, equal employment opportunity regulations, and wage standards protection under the Davis-Bacon Act.

4. Another set of regulations protects the interests of those who will be directly affected by a highway project. These include the assurance of public hearings covering both the location and the design of a proposed project.

In addition, requirements are provided to insure that those displaced by a highway project will be appropriately relocated and adequately compensated.

Taken altogether, these requirements amount to a procedural labyrinth. The one item that seems to be missing in this formula is a procedure to insure that the projects will be built within some reasonable time frame and with some reasonable consideration of the total costs involved.

We agree that it is important to have Federal standards which establish a minimum acceptable quality of road work where Federal funding is involved. It is also appropriate that the State and local governments bear the additional expense when projects are built to standards higher than the Federal requirements.

We further agree that there is a legitimate and proper Federal interest in the preservation of the natural environment and in the protection of workers and others directly concerned with highway construction.

However, the total cost of a project must not be overlooked as a determining factor affecting the public welfare. In calculating costs, it must be recognized that time means money.

It must also be recognized that the maintenance of a paper processing bureaucracy is also a significant item of expense. We strongly object to the imposition of requirements where no accurate evaluation of the total costs has been made, and where the benefit of the requirement is vague and uncertain.

In the construction equipment manufacturing industry we have, during the last few years, redesigned many types of equipment to accommodate new Federal requirements.

These new regulations add to the cost of the machinery and in many cases involve substantial changes in the overall design. For example, roll-over bar structures cost a minimum of \$1,500 or more per machine.

This is reflected, of course, in a higher price tag and eventually in a higher cost of construction. The effect of the roll-over bar structure in reducing the severity of accidents is still unproven and subject to conjecture.

The main objection to a massive Roll-over Protective System (ROPS) retrofit program of all existing models in the field is the poor ratio of extraordinary cost to proven safety effectiveness.

To date no one, including public officials, safety organizations or labor unions, has come up with credible statistics to show that ROPS retrofit is critical to proven safety effectiveness.

The public, already overburdened by the costs of innumerable ecology and other safety requirements, should not be required to absorb this added burden of further increases in construction costs.

The cost of this one item alone to the industry is approximately \$700 million. Although I know that this specific item is not within the purview of this subcommittee, the example does point out the magnitude of this problem, particularly in terms of excessive costs to the highway program and our industry.

We are currently in the process of studying machinery design to determine what can be done to make equipment less noisy. The standard which eventually will be imposed is still a subject of considerable controversy.

We have yet to decide the basic question of what amount of noise exposure is really harmful to the health, and what degree of harm actually results.

In addition to the physical protective devices required on construction machines today, the Noise Control Act of 1972 empowered the Environmental Protection Agency to coordinate all Federal activities relating to noise abatement.

It further directed the EPA Administrator to establish noise limits standards within 18 months for construction machines, engines, and other equipment.

One of the most important features of the noise law which we strongly supported was Federal preemption of authority. This precludes State and local governments from adopting or enforcing their own noise limits standards contrary to Federal law.

It is the intent of the law to provide one set of uniform noise limit regulations on a nationwide basis for construction equipment. This

prevents a multiplicity of nonuniform State and local government regulations which would interfere seriously with the movement and sale of equipment in interstate commerce.

It should be pointed out that while EPA is primarily concerned with limiting construction noise from the standpoint of environmental effects, Federal regulations under OSHA are already in effect to limit worker exposure to noise. The OSHA noise regulations, limit the duration of exposure for a workman to sound levels exceeding 90 decibels on the A scale or DBA. This one requirement alone will cost the construction industry approximately \$13.5 billion in order to comply.

Oversimplification of the noise abatement problem frequently leads many people to believe that engine exhaust noises are the sole culprit. Some say that larger mufflers on scrapers or dozers, for instance, will turn the trick. To be sure, this is part of the problem. However, noise reduction from exhausts permits other machine noises to become more dominant.

The operator of an excessively noisy machine can presently be protected by something as simple as earmuffs or earplugs. Now, EPA is proposing reducing the noise level to 85 DBA, which will increase the cost of compliance to approximately \$33 billion, according to conservative estimates.

All of these costs, of course, are eventually passed on to the public in the long run. Therefore, I felt it important to let this subcommittee know some of the problems we are currently having in the construction industry and how they have increased the cost of the highway program.

We have discussed several aspects of the specific procedural requirements affecting the highway program in our printed booklet which accompanies this testimony. In the interest of time and with your permission, Mr. Chairman, I will refrain from reading the text and ask that it be included in the record.

Senator BURDICK. It will be received without objection. (See p. 1595.)

Mr. NELSON. Thank you.

I would like to refer to the material on pages 1, 3, 11, 12, and 13. It relates to the urgent need to continue the Federal-aid highway program, impoundment, redtape, other highway program impediments, repeal of the Davis-Bacon Act, the statutory definition of construction, and the section headed, "Highway Program Is Rich in Employment Values." A few brief comments on some of these items are in order.

We commend the efforts of this committee and the Congress to accelerate the highway program during calendar year 1975. Total obligations for the fiscal year were in excess of \$7.8 billion.

The passage of S. Res. 69 in April 1975, under the leadership of Chairman Randolph was extremely helpful in assisting States to accelerate their construction program this spring and summer. Permitting States to shift funds freely from one Federal-aid category to another has also eliminated a lot of problems.

The highway program is currently being implemented without excessive high bidding and with no shortages of bidders. In the face of this excellent performance, the administration's budget calls for Federal-aid highway obligations of only \$5.2 billion in fiscal year 1976.

In view of the level of obligations in fiscal year 1975, this figure is obviously ridiculously low. At this time, when States are being encouraged to use highway funds in order to stimulate employment, it is an excellent time to end the impoundment of Federal-aid highway funds forever.

Conclusion: The impoundment of Federal-aid highway funds should be ended forever.

The intent of the certification acceptance provision of the 1973 Highway Act was to extend the benefits of the "secondary road plan" to the other Federal-aid systems, except the Interstate System. Under the "secondary road plan," a State could satisfy most Federal requirements by certifying that a project had been planned, designed, and constructed in accordance with standards which had been adopted by the State Highway Department and approved by the Secretary of Transportation.

It now appears that the elimination of one cumbersome provision was accompanied by the formation of another one.

A strict interpretation of this provision would suggest a need for Federal officials to undertake a close and continuing scrutiny of State highway department regulations to make sure that they in no way deviate from comparable Federal regulations.

This is, indeed, an area where joint Federal, State, and local cooperation is needed to develop effective procedures. We are advised that the Federal Highway Administration and the American Association of State Highway and Transportation Officials are working together to develop legislative language that will make the certification acceptance procedure effective.

Conclusion: DOT and FHWA should work out language that will make this plan work.

The simplification of the structure of the numerous categorical grant programs is another action which should be taken to avoid administrative confusion and to make the program work more effectively.

The present 38 categories is an unworkable number and severely limits the effectiveness of the Federal-aid highway program. ARBA recommends five major categories; namely, Interstate, Rural, Urban, Bridges, and Safety.

Conclusion: Every possible effort should be made to reduce the number of categorical grants to a minimum.

ARBA and others have struggled for more than a year with the matter of expanding the statutory definition of "construction" in section 101 of title 23, so as to make it clear that a major resurfacing project is eligible for Federal aid. We are strongly opposed to Federal aid for maintenance. Seal coating and pothole patching should not be eligible for Federal assistance.

However, amending the definition of "construction" by including the word "resurfacing" would be very helpful. We think that this will solve the current problem as to which kinds of reconstruction are eligible for Federal aid.

We further suggest that the committee report include language to make it clear that it is not intended that patching and seal coating be construed as resurfacing.

Conclusion: We strongly support an amended definition of "construction" to specifically include the word "resurfacing."

ARBA strongly opposes the Davis-Bacon Act. In effect, we have two minimum wage standards within the United States, one for construction workers and one for all other workers. It is extremely difficult to understand why construction workers currently need this added protection.

As we all know, the Davis-Bacon Act does not purport to set a minimum wage. It requires that workers covered by the act be paid at least the prevailing wage. This prevailing wage, once it is determined, becomes the minimum wage paid for that class of labor in that community. It can never go down, it can only go up.

We are still in inflationary times and are desperately trying to hold down prices. Why then, do we still continue with this procedure which guarantees that wage rates will continue to move steadily upward?

Conclusion: The Davis-Bacon Act should be suspended immediately with respect to the Federal-aid highway program and eventually repealed in its entirety.

The Federal Highway Administration has calculated that for every \$1 billion invested in Federal-aid highway projects, an average of 26,000 onsite jobs are created.

In addition, this amount of work also involves 28,700 offsite jobs and 71,750 man-years of "induced" jobs. Therefore, the fiscal year 1975 Federal-aid highway program will produce in excess of 1 million man-years of highly productive work.

ARBA thought it would be a good idea for us to run our own employment survey. We asked our contractor members to report the total dollar value of their work in 1974 and the average number of employees.

The results of our survey are shown in detail on pages 12 and 13 in our printed booklet. We found an average of 23,290 onsite jobs for each \$1 billion of work, which is a reasonably close correlation with the FHWA figures.

Conclusion: Highway construction work is extremely productive in terms of employment values and should be expanded in the years immediately ahead.

This concludes our testimony, Mr. Chairman. We appreciate this opportunity to present the views of the American Road Builders' Association to the Subcommittee on Transportation. We are very anxious to answer any questions you may have of us during the discussion which will follow.

Senator BURDICK. We thank you.

Mr. Patrick Parenteau.

[The ARBA booklet referred to follows:]

**1975 ARBA HIGHWAY
LEGISLATIVE PROPOSALS
Presented by the
AMERICAN ROAD BUILDERS
ASSOCIATION
to the
UNITED STATES SENATE
COMMITTEE ON PUBLIC WORKS
SUBCOMMITTEE ON TRANSPORTATION**

July, 1975
Washington, D.C.

WITNESSES FOR ARBA'S 1975 HIGHWAY LEGISLATIVE PROPOSALS

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THE URGENT NEED TO CONTINUE THE FEDERAL-AID HIGHWAY PROGRAM

The Federal-aid highway program has been a long-range and highly successful response to a very basic national need. The Nation's road and street network is an absolutely essential element in our total transportation system. Roads carry more than 90 percent of all passenger traffic, more than 22 percent of intercity freight as measured in ton-miles, and virtually all freight movements within urban areas.

Adequate roads are essential to the efficiency of other modes of transportation. For example, rail freight movements, both piggy-back and otherwise, depend on highway transportation for delivery to the railhead and distribution from the rail terminal. Urban public transportation moves preponderantly on public streets. A large percentage of the door-to-door travel time involved in a typical trip by air is spent not in the air but on the roads and streets connecting the airport with ultimate origins and destinations.

Roads and streets are visible to virtually every citizen virtually every day. However, there seems to be a certain lack of awareness that roads wear out and need to be rehabilitated, modernized and rebuilt. The 1974 National Highway Needs Report bears out the fact that the future highway needs do not take the form of additional mileage. The report envisions a total national system of 3,925,000 miles by the year 1990, as compared with 3,806,000 miles in 1973. The same report summarizes total national needs for the 1973-1990 period at \$428 billion for arterials and collectors only. This figure does not include the cost of completing the Interstate System. The needs, essentially are improvement needs—the reconstruction and modernization of roads already in place.

Highway travel exceeds 1.3 trillion vehicle miles per year. Projections to 1990 are necessarily specu-

lative and range upward and downward from a base estimate of 1.8 trillion vehicle miles. The amount of future highway travel will vary depending, among other things, on the availability of petroleum, the degree of success in developing alternative fuel sources, and the degree of success in developing more fuel-efficient motor vehicles. There is every reason to believe that, at the very least, highway travel will continue at its present level for the indefinite future.

The same uncertainties cited above, related to fuel consumption, are impacting on State and local highway fiscal planning. Sudden and unpredictable fluctuations in State motor fuel tax revenues are underlining the importance of the more broadly based and, hence, more even flow of Federal assistance for highway development.

CONCLUSION: The Federal-aid highway program should be continued in its current form with expanded levels of funding in the major categories.

EXTENSION OF THE FEDERAL HIGHWAY TRUST FUND

A continuing program of highway improvement is in the national interest and, therefore, an important function of the Federal government.

The 915,000 miles of Federal-aid systems extend into virtually every local government jurisdiction in the United States. No other capital expenditure program of the Federal government directly affects the lives of so many citizens in so many parts of the United States as the highway program. No Federal program is more closely intertwined with the operations of State and local government agencies. The continuing highway program requires close coordination, long-range planning, and dependable funding.

The Highway Trust Fund provides the element of dependable funding, and does so in an equitable manner.

The Highway Trust Fund is not a "sacred cow," nor is it a formula-

tion endowed with magical qualities. It is, simply, a fair and reasonable mechanism to direct revenues from taxes on highway users into support for the continuing highway program.

ARBA strongly supports the principle of linking special user taxes with specific programs from which the users directly benefit. The Airport and Airway Trust Fund works in a similar fashion to benefit the users of the Air Transport system. Along with many others, ARBA is interested in finding an equitable tax package to support a trust fund for public transportation. However, we do not believe that it is equitable or fair to commingle these special transportation user revenues in a single general transportation fund.

We recognize, of course, that this subject matter is primarily within the jurisdiction of another committee. However, this is a subject which must be considered in connection with a bill to extend authorizations beyond the October 1, 1977, expiration date of the Highway Trust Fund.

At this time, we are not recommending any changes in the tax structure supporting the Highway Trust Fund. The taxes have remained essentially unchanged since 1959. Since that date, general price levels have risen dramatically, lessening the trust fund's productivity, in terms of constant dollars. Nevertheless, the trust fund has performed its mission exceptionally well over the years. Trust fund receipts for the past five years are as follows: (millions of dollars)

Fiscal Year 1971	5,725
Fiscal Year 1972	5,528
Fiscal Year 1973	5,912
Fiscal Year 1974	6,652
Fiscal Year 1975 (11 months)	6,056

CONCLUSION: ARBA recommends an indefinite extension of the Highway Trust Fund beyond the current expiration date of October 1, 1977, with all current taxes extended at their present levels.

INCREASED RURAL TRANSPORTATION NEEDS

Several factors have contributed to a serious deficiency in rural roads in recent years. Among these items are:

1. Since 1956, we have given priority attention to the completion of the Interstate program. The Interstate routes are the main arteries of our nation's transportation system and Interstate completion is properly a matter of high priority. At the same time, the normal and necessary program of rehabilitating older primary and secondary routes has not kept pace with urgent needs.

2. Urban congestion has been a highly visible problem which, to some extent, has drawn attention and funding away from less conspicuous rural needs. As we have become an increasingly urbanized society, many rural counties have lost population and suffer from a diminished tax base needed to fund road improvements.

3. Despite population loss, rural America has turned to full agricultural production. Rural America's transportation requirements for the movement of farm products have never been higher!

4. About 50,000 miles of rail line have been abandoned since the 1920's and much of the branch line trackage still in operation is currently very poorly maintained. Agricultural areas served by these lines have turned to highways for the movement of farm produce.

The 1974 Highway Needs Study, summarizing highway needs from 1973 through 1990, indicated total rural roads needs of \$210 billion. This figure excludes the needs of roads of purely local character. At least 700,000 miles of rural roads need to be widened, straightened out, resurfaced or completely reconstructed. The Needs Study notes that States are giving high priority to the rehabilitation of existing roadways rather than expanding new facilities.

In many cases this assignment of priority is a matter of simple necessity. Vital highway links which are

deteriorating to the point of becoming unusable must be restored to useful service now. This must be done before attention can be given to capacity increases or improvements in highway alignment. In some developing areas, such as Appalachia, for example, there is a need for the development of new highway corridors.

On the other hand, in most of the nation, the rural highway network is in place. What is needed is a continuing program to rehabilitate roads which are worn out. New shoulders and other safety features need to be provided. Many rural

roads are unsafe for trucks, school buses and, in many cases, private automobiles as well.

CONCLUSION: ARBA recommends continuation of an adequately funded rural highway improvement program. Continued opportunities should be afforded for county governments to work within the Federal-aid framework. Federal assistance should be provided for the reconstruction of bridges and bridge approaches on roads not located on any Federal-aid system.

BELOW: Unsurfaced road stands as evidence that improvements to rural roads have not kept pace with urgent needs. ACROSS: New shoulders and other safety features need to be provided.



END OF IMPOUNDMENT OF FUNDS

The first half of Calendar Year 1975 saw a welcome relief from highway impoundment.

President Ford, on February 11, 1975, ordered the release of \$2 billion in previously impounded funds. Subsequently, the passage of S. Res. 69 on April 24, 1975, brought about the release of an additional \$8.8 billion of impounded highway funds.

Freed of the fetters of impoundment, the State highway departments obligated more than \$5.3 billion of Federal-aid highway funds during the last four and one-half months of Fiscal Year 1975. Total obligations for the fiscal year were in excess of \$7.8 billion.

The table shows total Fiscal Year 1975 obligations in each State and State obligations as a percentage of the original allotment of \$4.6 billion. For example, Hawaii's obligation ceiling was \$32.4 million; the State obligated \$138.9 million, or 432 percent.

Top 20 States (Fiscal Year 1975)		Total obligations (millions)	Pct. of original ceiling
1. Hawaii		138.9	432
2. Wyoming		84.4	301
3. Nebraska		105.1	288
4. Mississippi		123.8	281
5. N. Carolina		233.0	278
6. Idaho		80.7	274
7. Maryland		295.9	258
8. Indiana		185.9	257
9. Arkansas		98.7	241
10. Montana		112.5	241
11. Utah		105.2	230
12. W. Virginia		154.6	229
13. Georgia		227.7	229
14. N. Dakota		42.9	222
15. Illinois		445.2	221
16. Nevada		57.1	216
17. Alaska		142.3	214
18. Iowa		122.3	210
19. Colorado		159.8	200
20. Tennessee		136.9	199

In 20 States, the Fiscal Year 1975 program more than doubled what would have been possible under the original \$4.6 billion limitation.

While this has been a very desirable short-term situation, during this period of high unemployment in the construction industry, the impoundment of Federal-aid highway funds continues to be an extremely serious obstacle to the long-range highway program. What we are witnessing now, figuratively speaking, is the bright side of a big cloud that has hung over the highway program since 1967. The program has been regularly accelerated and decelerated as the economic experts determine that the economy needs to be stimulated or dampened.

The primary objective of the highway program should be to provide necessary transportation facilities, not to serve as an economic balance wheel. The Administration's budget calls for Federal-aid highway obligations of \$5.2 billion in Fiscal Year 1976. In view of the actual accomplishments in Fiscal Year 1975, this figure is obviously much too low. State highway officials, therefore, must de-

velop contingency plans and stand ready to expand or shrink their programs as conditions dictate. The industry must do the same. This is not easy. An efficient contractor develops a skilled labor force and an equipment fleet. He bids for jobs so as to maintain a continuity of work. By spreading his capital costs over a series of projects, he is able to hold down his bid prices. The amount of capital investment in the industry is determined, to a large extent, by the size of the program. When the program size fluctuates rapidly, it is very difficult for the contractor to maintain any stability.

The best assurance of a stable, economical program is to follow the course set out by Congress; that is, to make funds fully available for obligation upon apportionment. The present time, when States are being encouraged to use highway funds to stimulate employment, is a particularly good time to end the impoundment of Federal-aid highway funds.

CONCLUSION: The impoundment of Federal-aid highway funds should be ended forever.





COMPLETION OF THE INTERSTATE NOW!

In 1956, Congress established a 13-year program of authorizations for the Interstate program, ending in Fiscal Year 1969. The 1969 authorization, when translated into physical accomplishments, would result in the actual completion of the then designated 41,000-mile Interstate System by the year 1972.

It was the intent of Congress that necessary adjustments to the financing program would be made in order to ensure the simultaneous completion of the Interstate System in all States. It was intended that the taxes supporting the Highway Trust Fund would be adjusted upward or downward to fit the financial requirements of the total highway program. Extensive studies were made in order to make sure that the tax base was an equitable one. Provision was made for periodic cost estimates, so that authorizations and apportionments could be adjusted to fit the total need.

1. As the years passed we have strayed far afield from this well-conceived plan.

2. In 1968 the total mileage of the Interstate System was increased to 42,500 miles.

3. We have stretched out the program to the point where no fixed completion date actually exists.

The philosophy of the Interstate stretchout was embodied in the 1973 Highway Act. Between 1970 and 1973, Interstate authorizations were at the level of \$4 billion per year. They were reduced to \$2.6 billion in Fiscal Year 1974 and to \$3 billion in Fiscal Years 1975 and 1976. The present law provides for authorizations at the level of \$3.25 billion for Fiscal Years 1977, 1978 and 1979.

Important links to the Interstate System must be completed and decisions must be made on deletions of certain segments.

The 1974 Interstate Cost Estimate makes it very clear that a substantial increase in authorizations will be needed to provide for completion within a reasonable time frame. H.R. 8235 provides for authorizations of \$4 billion annually through Fiscal Year 1987, with a closing authorization of \$2.885 billion for Fiscal Year 1988!

The Federal Highway Administrator has said on many occasions that "at the present rate, the Interstate System will not be completed until around the year 2007—incredible as that may seem."

The total financial requirement will be increased to some extent by price inflation in the future and decreased, to some extent, by the deletion of certain controversial Interstate routes. Although these deletions may involve less than 20 projects totalling less than 250 miles, the costs of these segments are exceptionally high. It is current-

ly estimated that all of these deletions could amount to as much as \$6.0 billion.

We believe that decisions on deletions should be expedited so that the future cost estimates to complete the System can be reduced and made as realistic as possible.

It is also important to modify the apportionment formula so that States which are ready and willing can complete their Interstate highways on an accelerated schedule. This can be accomplished by giving the Secretary of Transportation a discretionary fund to move added Interstate funds into States which are ready to use them.

CONCLUSION: ARBA recommends future Interstate authorizations at the level of \$5 billion per year. This should include \$500 million to be allocated at the discretion of the Secretary of Transportation directly to those states that are in a position to complete their systems.

States Nearing Interstate Completion

(As of March 31, 1975)

As indicated on the map on the following page, many miles of Interstate highway already open to traffic require further improvement to reach full Interstate standards. Some short mileage segments, such as in the District of Columbia, will be extremely difficult to complete. Nevertheless, the mileage figures are significant and indicate that several States are very close to having their full Interstate System mileage open to traffic.

More than 90% open to traffic	Pct.	Less than 60 miles not open to traffic	Miles
Arkansas	97	Delaware	11.5
Oklahoma	96	District of Columbia	17.4
Kansas	95	Arkansas	17.8
Oregon	95	Maine	19.9
Maine	94	New Hampshire	21.4
Nebraska	94	Hawaii	27.8
Massachusetts	93	Nebraska	28.1
New Mexico	93	Oklahoma	29.2
California	92	Maryland	31.3
Mississippi	92	Vermont	35.2
North Dakota	92	Oregon	38.8
Ohio	92	Kansas	39.4
Tennessee	92	North Dakota	48.2
Indiana	91	Massachusetts	51.0
Maryland	91	Mississippi	58.0
Pennsylvania	91	Rhode Island	58.1

URBAN TRANSPORTATION

Historically, one of the principal functions of the city has been that of serving as a transportation interchange. The earliest American cities were ports, where goods and passengers were interchanged between land and water transportation. In Nineteenth Century America, new cities were developed at the junctions of rail lines. The modern city is a complex of freight and passenger transportation movements, frequently requiring the coordination of surface, air and water transportation facilities.

The Federal-aid Highway Act of 1962, with its requirement that urban highway projects conform to a continuing comprehensive transportation planning process, was a giant step forward. This action ensured proper consideration of the interaction among various modes

of transportation. Urban public transportation projects are subject to the same planning requirement. ARBA heartily supports the program and funding authorized by Congress in the National Mass Transportation Assistance Act of 1974.

Any comprehensive program for the improvement of traffic movement within urban areas must depend on city streets for a large proportion of all traffic. These include not only the home-to-work trips by bus, taxi and private automobile, but also the numerous trips to shopping areas, schools and other destinations scattered throughout the urban area.

Urban traffic congestion is costly in terms of time and fuel wasted. Vast improvements in traffic flow are possible through channelization at intersections, exclusive and preferential lanes for bus traffic, judicious widening of streets and computerized traffic signals. Van

and car pooling, improved bus systems and fringe parking facilities can all make vital contributions to improved traffic flow within urban areas.

The Federal government, certainly, should refrain from imposing rigid transportation "solutions" on urban areas. Indeed, there is much to be said for individual approaches, worked out at the local level, which add to the distinctive character of a city. San Francisco's cable cars would not be useful everywhere, but they are an important element of that city's unique flavor. On the other hand, it is essential that the Federal investment be protected through the issuance of reasonable requirements and insistence on comprehensive transportation planning.

CONCLUSION: ARBA vigorously supports the urban highway program as a separate category of funding.

Van and car pooling, improved bus systems, fringe parking facilities and exclusive bus lanes can all make vital contributions to improved traffic flow within urban areas.



ACCELERATED BRIDGE REPLACEMENT PROGRAM

The Special Bridge Replacement Program was established by the Federal-Aid Highway Act of 1970. This action was taken in response to detailed State by State estimates that almost 90,000 of the 530,000 highway bridges in the United States were critically deficient. At that time it was estimated that it would cost in excess of \$16 billion to complete this nationwide bridge replacement program. About 24,000 of the critically deficient bridges are on the various Federal-aid systems.

The National Bridge Inspection Program was established in 1970 as a means of obtaining an accurate inventory of all deficient bridges. Out of 230,000 bridges on the Federal-aid systems, a total of over 7,000 are classified as structurally deficient. Of this number, almost 3,500 are restricted to passenger cars only.

An additional 25,400 bridges are classified as functionally obsolete since their design does not permit them to safely serve the road systems of which they are integral parts. In addition to these 32,400 deficient bridges, some 45,700 additional bridges are classified as functionally obsolescent. These bridges need to be replaced in a relatively short period of time.

The cost of replacing the 32,400 deficient bridges is estimated at \$10.4 billion. It is significant to note that 31,000 of these critically deficient bridges presently require some form load limit posting. Over three hundred (300) of these bridges are currently closed to all traffic.

Bridge replacement funds are currently allocated under a needs formula based on the total cost of replacing 32,400 bridges. Under this type of allocation, the cost of one very expensive high priority bridge replacement can greatly exceed the total funds available to a single state in any given year.

States have already submitted applications to the Federal Highway Administration for funds to replace about 40 percent of the deficient



States have already submitted applications for funds to replace 40% of the 32,400 deficient bridges. Under the limited Federal-aid program now in effect, it will take over 60 years to just catch up with backlog needs.

bridges. Under the very limited Federal-Aid program now in effect, it will take over 60 years to just catch up with the deficient bridge needs!!!

CONCLUSION: ARBA recommends a substantial increase in the Federal-Aid funding for the special bridge replacement program.

HIGHWAY SAFETY PROGRAM

The 1973 Highway Act established several categories of safety construction projects with separate funding and preferential matching ratios. These programs include rail-highway grade crossing improvements, the elimination of high-hazard locations, the elimination of roadside obstacles, a special pavement marking program and the "safer roads demonstration program" for off-system roads.

The special bridge reconstruction and replacement program is frequently considered as a part of the safety construction program package, though it was established earlier.

The five special categories established by the 1973 Act were proposed as "high payoff" programs which could quickly and effectively reduce traffic accidents with a relatively small investment of money. In each case, periodic reports to Congress are required, so that the safety effectiveness of these programs can be evaluated. In this sense, they are true "demonstration programs."

Unfortunately, separate funding for these programs was not provided by the Administration although this was the intent of Congress. Under the impoundment policy, States could implement these programs only at the cost of diminishing other programs. In spite of preferential matching ratios, the safety construction projects are somewhat disadvantaged in the competition for Federal funding since:

1. The programs are new and the implementing regulations are not completely integrated into routine administrative procedures.
2. The detailed reporting requirements which are an integral part of these "demonstration programs" add a further administrative burden.
3. The typical safety construction project is relatively small. As States attempt to minimize the "red tape" associated with Federal aid, they tend to use Federal assistance with larger projects and to

perform the small jobs with 100 percent State funding.

It seems clear that special funding, distinct and separate from the regular Federal-aid program, is required if these safety construction programs are to be implemented and their cost effectiveness accurately measured.

The safety construction programs dovetail effectively with the older safety grant and safety research programs, commonly known as the Section 402 and Section 403 programs. These programs, too, have suffered severe funding difficulties. They are comprehensive, they pro-

vide opportunities for State and community action, and they need to be encouraged. These programs provide the cutting edge of the national effort to reduce fatalities, injuries and property losses on our nation's highways.

CONCLUSION: ARBA recommends that the funding for Sections 402 and 403 be substantially increased and that all of the safety construction programs, except the special bridge replacement program, be consolidated into a single category with an increased level of funding.

The highway safety program contained in the 1973 Highway Act provides funds to improve or eliminate railroad grade crossings, high hazard locations and other demonstration programs. ARBA recommends that funding for this high pay-off activity be substantially increased.



RED TAPE AND OTHER HIGHWAY PROGRAM IMPEDIMENTS

We commend the efforts of this Committee to seek out the sources of Federal "red tape" in order to minimize this problem. It is an extremely difficult area but one that is immensely important in terms of overall costs and delays to the program. As noted in the case of the "certification acceptance" provision included in the Federal-Aid Highway Act of 1973, it often appears that the elimination of one cumbersome provision is accompanied by the formation of another one.

The "red tape" situation has reached a critical stage. Questions are constantly being asked whether the Federal-aid highway program can survive through all of the restrictions that have been placed upon it. These are by no means altogether the responsibility of the Department of Transportation, involving also the programs administered by the Environmental Protection Agency, the Occupational Safety and Health Administration and other Federal agencies. They include such judicial decrees as those issued by the Second and Seventh Circuit Courts which suggest the formation of a new Federal bureaucracy to prepare environmental impact statements. We commend this committee for its work in developing H.R. 3787 and in supporting H.R. 3130, intended to correct this particular problem. ARBA supports the House position on H.R. 3130.

The serious nature of the "red tape" problem has been recognized at the Federal level. The general revenue sharing program, which puts money at the disposal of State and local governments with a minimum of "strings" attached is essentially a Federal mechanism designed to bypass its own bureaucracy! We believe that there is a proper and affirmative role for the Federal government to play in future highway development. Federal involvement properly goes beyond the function of collecting and distributing money. The thick underbrush of needless paperwork and delay must be

cleared away in order for the system to work effectively.

The intent of the certification acceptance provision of the 1973 Highway Act was to extend the benefits of the "secondary road plan" to the other Federal-aid systems, except the Interstate System. Under the "secondary road plan," a State could satisfy most Federal requirements by certifying that a project had been planned, designed and constructed in accordance with standards and procedures which had been adopted by the State highway department and approved by the Secretary of Transportation.

The certification acceptance provision makes the simplified procedure available to States only after the Secretary of Transportation has found that projects "will be carried out in accordance with State laws, regulations, directives, and standards establishing requirements at least equivalent to those contained in, or issued pursuant to" Title 23, U.S. Code.

A strict interpretation of this language would establish a need for Federal officials to undertake a close and continuing scrutiny of State highway department regulations to make sure that they in no way deviate from comparable Federal regulations. It offers the States the opportunity to move from one large tangle of red tape into another labyrinth.

We are advised that the Federal Highway Administration and the American Association of State Highway and Transportation Officials are working together to develop legislative language that will make the certification acceptance procedure effective. This is, indeed, an area where Federal-State cooperation can be most useful in developing effective procedures.

The simplification of the structure of categorical grant programs is another action which can be taken to avoid administrative confusion and put money to work more effectively.

CONCLUSION: Every possible effort should be made to simplify the administration of the program and eliminate unnecessary requirements.

REPEAL OF THE DAVIS-BACON ACT

The Davis-Bacon Act was enacted in 1931. It was originally intended to protect contractors from cut-throat out-of-town competitors. By importing cheap labor, out-of-townners might be able to under-bid the local contractors. Basically, it requires that laborers and mechanics be paid wages not less than the prevailing wage rate in the immediate locality for the same type of work on similar construction. The Act applies to construction contracts in excess of \$2,000 to which the Federal Government is a party. The Federal-Aid Highway Program is therefore included in this outdated requirement.

In reality, construction workers are given special minimum wage considerations, over and above that provided for workers in general by Federal minimum wage legislation. The rationale for giving such special protection for workers in our particular industry is very obscure. Whatever the reasons for the special treatment may be, the result is that wage rates move steadily upward. There are several reasons for this:

1. In determining the "prevailing wage," the Department of Labor first looks to see if a majority of workers in a particular job classification are making exactly the same wage. If so, this is the "prevailing wage." In a majority of cases, this situation does not exist. The Department of Labor then applies the "30 percent rule." If 30 percent of workers are making exactly the same wage, this is the "prevailing wage." If the application of this rule does not identify a class large enough to make a determination, an average wage rate is computed. The "prevailing wage" becomes, for all practical purposes, the minimum wage paid in the community. It can never go down, and in virtually every case will rise.

2. The precise boundaries of the area to be surveyed for a wage determination are a matter of administrative judgment. Frequently, a wage determination for a rural or suburban job site relies on data for

an urban area. Urban wage rates tend to become "suburbanized."

3. Where there is a question as to the proper job classification for a worker or group of workers, the question is usually resolved by going to the higher wage classification.

4. The Davis-Bacon wage rate tends to become the standard rate for construction not covered by Davis-Bacon. As the ripple effect continues, upward pressure is applied to all wage rates in the community.

Davis-Bacon is an obsolete law which probably should never have been passed in the first place. The special protection which it was supposedly provided local contractors is completely contrary to the spirit of the Federal-aid highway program and the free enterprise system.

The inflationary impact of Davis-Bacon is difficult to measure since, as noted above, Davis-Bacon wage rates tend to spread throughout the construction industry. However, there are numerous instances on record where the application of Davis-Bacon rates to a particular project has increased projected labor rates by 20 percent or more. Many of these are documented in Report No. 10 of the Labor Relations and Public Policy Series published by the Wharton School of the University of Pennsylvania.

CONCLUSION: The Davis-Bacon Act should be suspended immediately, with respect to the Federal-aid highway program and eventually repealed in its entirety.

STATUTORY DEFINITION OF CONSTRUCTION

The definition of "construction" in Title 23, U.S. Code, Sec. 101 says (in part) that "construction" includes "all expenses incidental to the construction or reconstruction of a highway."

The great majority of non-Interstate Federal-aid highway projects consists of reconstruction. Normally, such reconstruction projects encompass an upgrading of the origi-

nal design standard. For example, wider shoulders may be provided, the alignment of the roadway may be straightened, or the surfacing may be replaced with a higher type pavement. These improvements of the original design are often called "betterments."

Considerable difference of opinion exists in various areas of the country as to the kinds of reconstruction eligible for Federal aid. Some see the inclusion of "betterments" as a necessary criterion. Others feel that a complete repaving, restoring the road to its original design but without "betterment," is a type of project which should be eligible for Federal assistance.

In our view, a project which significantly extends the useful life of a Federal-aid highway should be eligible for Federal assistance. Thus, a major repaving project would be eligible, a routine sealcoating would not be. "Betterments" are needed on many highway segments. However, we should avoid the situation where a highway department may look for a few "betterments" to add to a project only for the purpose of making a repaving project eligible for Federal aid.

H.R. 8235 would amend the definition of construction by including the word "resurfacing." We commend this amendment which we believe will give the Federal Highway Administration legislative authority to provide the proper administrative direction. It may be helpful if the legislative history makes it clear that sealcoating and the patching of potholes is not to be construed as resurfacing.

CONCLUSION: We support the amended definition of "construction" contained in H.R. 8235.

HIGHWAY PROGRAM IS RICH IN EMPLOYMENT VALUES

The Federal Highway Administration has calculated that for every \$1 billion invested in Federal-aid highway projects an average of 26,000 on-site jobs is created. In

addition, this amount of work also involves 28,700 off-site jobs and 71,750 man-years of "induced" jobs. Therefore, the Fiscal Year 1975 Federal-aid highway program produced in excess of 1,000,000 man-years of productive work.

To test the validity of this estimate, ARBA conducted a survey of its almost 2200 contractor members. We asked them to report the total dollar value of their highway work in 1974 and the average number of employees. More than 700 contractors responded. Their responses indicated an average of 23,290 on-site jobs for each \$1 billion of highway work. The correlation between the ARBA figures and the FHWA figures is reasonably close.

Larger contractors are more likely to respond to questionnaires of this kind than smaller contractors since their more sophisticated record-keeping systems permit easier retrieval of data. It may be assumed that smaller contractors are more likely to be engaged in high labor-intensive work. Inclusion of their data, therefore, would tend to give a higher average of jobs per billion dollars of work.

CONCLUSION: Highway construction work is extremely productive in terms of employment values and should be expanded in the years immediately ahead.



**ARBA CONTRACTORS RESPONSES TO
"DOLLAR PER WORKER" SURVEY**

STATE	NO. OF RESPONSES	DOLLAR VOLUME OF HIGHWAY WORK	PEOPLE EMPLOYED
Alabama	29	\$ 100,925,000	2,399
California	9	16,755,000	400
District of Columbia	5	12,708,000	525
Florida	52	323,182,000	7,905
Georgia	25	253,663,000	4,269
Illinois	24	118,626,000	2,214
Indiana	24	107,561,000	2,209
Iowa	15	92,857,000	1,758
Kansas	3	12,598,000	530
Kentucky	19	74,995,000	2,161
Louisiana	6	54,281,000	1,102
Maryland	24	135,710,000	3,432
Massachusetts	13	18,526,000	410
Michigan	39	154,594,000	3,270
Minnesota	8	39,025,000	802
Mississippi	26	64,783,000	1,710
Nebraska	3	6,046,000	200
New Mexico	3	24,050,000	593
New York	7	42,525,000	1,029
North Carolina	19	132,525,000	2,988
Ohio	49	204,486,000	4,284
Oklahoma	13	33,156,000	847
Pennsylvania	66	226,901,000	5,943
South Carolina	16	50,083,000	1,651
Tennessee	36	142,606,000	3,303
Texas	13	117,553,000	3,548
Virginia	66	241,777,000	5,149
West Virginia	11	83,247,000	1,630
Wisconsin	48	95,221,000	2,515
States with less than 3 responses	19	132,892,000	3,199
Contractors with work in multiple states	19	319,642,000	7,892
TOTALS	709	\$3,433,501,000	79,967

Based on the results of this study 23,290 on-site jobs are created for every \$1 billion dollars of highway construction work performed.



According to FHWA estimates, every \$1 billion of highway projects creates about 26,000 on-site jobs, 28,700 off-site jobs and 71,750 man-years of induced employment.

ABOUT ARBA

ARBA—the American Road Builders' Association—speaks for 5400 members who constitute a broad cross-section of the transportation construction industry. ARBA members include contractors, public officials, engineers in private practice, manufacturers and distributors of construction equipment, producers and suppliers of materials and services, and civil engineering educators and students. The Association is dedicated to the furtherance of soundly financed, long range development programs for transportation, particularly highways, airports and urban public transportation.



At the May, 1975, meeting of the Western Association of State Highway Officials, ARBA President James A. Nelson presented the following parable to emphasize the problems of red tape, impoundment and the diversion of highway funds:

"THE COLLEGE ATHLETICS PARABLE"

The football teams in the Utopia Athletic Conference were of uneven quality and, in general, not good enough. In the best interest of all players and spectators, and in order to provide a better level of competition, the alumni of all the schools agreed to send athletic scholarship money to the Conference Commissioner, who would then distribute the money more or less equitably among the schools.

The plan worked out fine. All of the schools had better football teams, and the weakest schools were improved enough so that their teams could play a decent game against the top schools. All benefited—all were in the big time.

But, alas the Conference Commissioner became difficult—he lost sight of the planned end point.

He issued a great number of rules and regulations, prescribing the color of uniforms, the type of water buckets to be employed, and the musical instruments to be in the band which played the National Anthem. (This became known as "red tape.")

The Commissioner decided to keep part of the money in his own bank account and borrow it from time to time to pay for some heavy obligations he had undertaken. He was very fair about paying interest on this money. (This became known as "impoundment.")

The Commissioner decided to put more emphasis on baseball. Since he felt that football was over-emphasized, he thought it would be right to use some of the football money for baseball. (This became known as "balanced athletics.")

After awhile the donors got tired. The Utopia Athletic Conference went back to the small time again to the complete disservice of players and spectators alike.



During an ARBA meeting in January, 1975, the subject of the simplification of categories was discussed, and ARBA Director Ray Marriner, on the spur of the moment, composed the following poem:

Our program is hurting—so use the acronym BRUISE.

- B is for bridges—mostly out-dated.
- R means it's rural—whose votes are outweighed
- U is for urban—whose new love is rails.
- I means it's interstate—slow as the snails.
- S stands for safety—let's keep them alive.
- E is for everyone who hankers to drive.



STATEMENT OF PATRICK A. PARENTEAU, NATIONAL WILDLIFE
FEDERATION

Mr. PARANTEAU. Good morning, Mr. Chairman. My name is Patrick A. Parenteau. I am an attorney with the National Wildlife Federation, the Nation's largest conservation organization, with a combined membership of over 3 million persons.

On behalf of the National Wildlife Federation, I would like to take this opportunity to thank this committee for inviting us here to share some of our thoughts on the Federal-aid highway program. In keeping with the tenor of the subject of our discussion, I will try to keep my remarks brief and uncomplicated. To that end, I invite any questions to clarify points that I may make during the course of my testimony.

I would like to make one specific disclaimer before I begin; which is, that I do not intend to address all of the various factors and objectives which are contained in the Federal-aid highway program. My concern today is with the environmental safeguards which have been engraved upon the Federal-aid highway program over the years and I do not intend to spread out into some of the areas that have been addressed by other witnesses.

I would like to make three general observations before turning to a discussion of some specific environmental procedural requirements that are contained in the Federal-aid highway program. One of these is that I would like to put the Federal highway program in perspective. First, the Federal-aid highway program must be put into a proper perspective as of 1975. While at one point in time it could be said that the highway construction was experiencing a boom, I do not think that that could be said any longer.

The Interstate Highway System is nearing completion. The highway trust fund is scheduled to expire in 1977, unless extended by congressional action, and we are entering a new era of transportation planning and transportation objectives. That era is to some extent dictated by forces outside of the transportation planning system. I refer specifically to the constraints imposed by our ever-diminishing supply of automotive fuels.

The second general observation I wish to make is that we who are concerned with the quality of our environment do not in any way attempt to defend or to justify the delays that are inherent in this complex highway planning process. If there was any doubt about its complexity before this hearing, that doubt has been extinguished by the presentation of this graphic flow chart here today.

Rather than defend delay, where it does exist, we feel that it should be quickly and effectively eliminated because the concern for the environment and the protection of vital resources cannot be furthered by delay.

As a final general observation, I would like to note that the concept of lead time is a difficult one to cast in objective terms. It is a very subjective concept. For instance, in my thinking, lead time does not begin to run until a decision is in the statements and testimony of other witnesses that a different notion of lead time is contemplated, one which calculates "lead time" from the first day a proposal to build a highway is advanced to the day the facility is opened to traffic.

It is our position that the time taken to consider a proposal should not be characterized as lead time but as planning time, a necessary precondition to sound decisionmaking.

Turning now to some specifics, a question frequently raised is the impact of NEPA on the Federal-aid highway program. A commonly cited criticism is that NEPA constitutes a hindrance or a clog in the process of planning and completing Federal-aid highways.

Actually, NEPA is an extremely useful planning tool, a basic decisionmaking document. The decision which NEPA contemplates are not only decisions as to how a particular highway should be built, but whether a particular highway should be built at all or whether there might be a better transportation alternative.

The problems that have arisen over the incorporation of NEPA's enlightened concepts into the Federal-aid highway program are primarily attributable to agency intransigence. Federal and State highway officials have stubbornly resisted implementation of NEPA's policy and procedure. Over the past 5 years a large number of controversies, a great amount of litigation and a host of conflicts have been generated by the difficulty that the Federal Highway Administration has had in coming to grips with the NEPA process.

Perhaps if the past 5 years had seen a concerted and vigorous effort to incorporate and integrate NEPA into the Federal-aid highway planning process, rather than bucking NEPA at every turn, we would now have a model transportation planning mechanism. Instead, we are just beginning to see the process function as it should.

One of the primary purposes of NEPA is to marshal all of the facts that go into making a decision in one document at one point in time to enable the decisionmakers to evaluate the project on its merits.

A second specific environmental procedural requirement arises out of section 4(f) of the Department of Transportation Act. This section is one that the National Wildlife Federation is particularly pleased to see in the body of Federal environmental law because it represents a very strong and a very rational congressional judgment that certain areas of our country represent unique resources and must be preserved except in the most unusual of circumstances.

Section 4(f) requires that the Secretary of Transportation determine that there are no feasible and prudent alternatives to the location of a highway in certain protected areas, those being recreation areas, publicly-owned parks, publicly owned wildlife and waterfowl refuges, publicly owned historic sites and privately owned historic sites that have been determined to be significant resources.

Section 4(f) represents, in effect, a hands-off policy. It is a clear congressional mandate to the transportation planners that they must be cautious of any type of transportation system which encroaches upon protected areas. It is not a difficult concept for people to understand, but apparently it is a difficult concept for people to accept because the history of compliance with 4(f) has been less than exemplary.

A third specific environmental requirement that we are particularly concerned with is section 7 of the newly enacted Endangered Species Act of 1973. Like section 4(f), section 7 constitutes a congressional policy that certain species and their habitat should not be adversely

affected by highway construction and other types of Federal activities.

Section 7 requires that all Federal agencies in all of their activities insure that any actions they take do not jeopardize the continued existence of species that have been listed by the Department of Interior as threatened or endangered and, further to insure that their actions do not destroy or modify habitat of these species that has been declared critical by the Secretary of the Interior.

These are strong measures. But they are necessary measures if we are to prevent the further annihilation of our important wildlife and plant resources.

I would like now to address the concept and the proposal that States be certified to execute certain environmental responsibilities presently executed by the Secretary of the Department of Transportation.

The proposal advanced in the Ford administration bill, is a very reckless and very dangerous precedent to set in this area. The drafting problems that are inherent in the bill in its present form would make a nightmare for any court to interpret. It is going to be, if enacted, a fertile source of litigation and controversy.

Aside from mere drafting problems, the very idea of certification acceptance in the Federal-aid highway program is itself improper. The argument may be made that precedent already exists in other Federal programs for this type of procedure, such as the community development program sponsored by the Department of Housing and Urban Development under the Housing and Community Development Act of 1974, but that argument disappears under careful scrutiny. The certification acceptance procedure contained in that act relates to a program totally dissimilar to the Federal-aid highway program. For that reason alone it cannot serve as precedent for the administration's present proposal.

The HUD program is basically a bloc grant program wherein communities and cities for their disbursement. Federal officials do not involve themselves in the step-by-step approval process which characterizes the Federal-aid highway program.

With regard to environmental considerations, certification acceptance amounts to placing the fox in charge of the chickens. I don't think anyone can seriously deny the institutional bias inherent in State highway departments. Such bias is a natural understandable fact of life, not a reprehensible vice. If one is in the business of building highways, he is naturally going to be inclined to propose the building of new highways and to defend those proposals as strenuously as possible.

If State Highway officials did not press for new highway construction where they perceived a need, they would not be fulfilling their administrative responsibilities. But the environmental requirements that have been enacted by the Congress require an objective evaluation of every proposal. This can only be accomplished if the evaluation is done by one who is not a captive of his own preference.

The Federal Highway Administration, in remarks by Administrator Tiemann before this committee earlier this year has stated that at the present time there is no real problem with bias because of the Federal review and comment procedure afforded by NEPA.

We submit that if the NEPA responsibilities are totally abdicated to the States, you will not have the same objective review and comment that currently exists. How then can bias be eliminated?

With regard to section 4(f), the certification procedure is even more dangerous. It was the specific intent of section 4(f) to remove the decision to locate a highway in protected areas from the decisions of the local officials. It was recognized that local officials would opt for cheaper public lands and public parks and recreation areas if the decision were theirs.

It was the intent of Congress to remove that decision to the Federal level to enable the Secretary of Transportation to make an independent objective evaluation of whether there was a feasible and prudent alternative to encroachment upon the protected areas. If that decision is turned back to the States, section 4(f) will effectively be repealed. Likewise, although the President's bill does not specifically mention section 7 of the Endangered Species Act, it is written so broadly that such would be a plausible interpretation.

There is a danger, then, that this bill may turn over responsibilities that are not even fully contemplated by the drafters of the bill. For instance, section 106 of the Historic Preservation Act, under which there are certain procedural requirements expected of Federal agencies, might be turned over. Uniform relocation assistance might be turned over. Section 7 of the Endangered Species Act might be turned over.

We do not feel that these carefully enacted requirements should be turned over, lock, stock, and barrel, to the States. But the greatest criticism of this bill is not even the substantive problems it presents, gross as they are. The most telling criticism is that the legislation it proposes is unnecessary. The ill, the problem that is attempted to be cured is an administrative problem. It is a delay problem. We feel that the solution to that problem is improving agency compliance with congressional mandates.

It would be a sad case, indeed, if requirements that were intelligently and rationally imposed upon Federal agencies by Congress would have to be carried out by the States simply because Federal agencies were not to effectively carry out congressional mandates.

In this case, it is our position that the delays and the problems that have emanated from environmental requirements are attributable to the agencies' intransigence. We do not feel that any amendments to the existing environmental laws are necessary to cure this problem. However, we feel that if such legislation were necessary, that it ought not come in one fell swoop as the administration's bill proposes. Already there is a bill to amend NEPA, H.R. 3130, recently reported out of conference to be voted on in the Senate shortly, certainly that bill represents a more rational, albeit unfortunate, approach to the delay problem.

Delegation of certain environmental responsibilities to the States is one thing. Abdication is quite another. Delegation as proposed in H.R. 3130, with appropriate guidelines and standards subject to review and independent investigation by the Federal agencies, represents a far more intelligent way to control the disbursement of Federal funds.

I think I have probably exhausted my time, Mr. Chairman. So I will conclude my remarks with the suggestion that a fuller analysis of the points I've raised is contained in my written statement which has been presented to the committee and which I trust will be incorporated into the record of these proceedings. Thank you.

[Mr. Parenteau's complete statement follows:]

STATEMENT OF PATRICK A. PARENTEAU
ON BEHALF OF THE NATIONAL WILDLIFE FEDERATION
BEFORE THE SENATE TRANSPORTATION SUBCOMMITTEE
OF THE SENATE COMMITTEE ON PUBLIC WORKS
JULY 29, 1975

On behalf of the National Wildlife Federation I am submitting this statement for inclusion in the record of these proceedings. NWF has been invited to appear and present testimony to the Subcommittee on Transportation of the Senate Public Works Committee on the subject: "Federal Procedural Requirements Affecting Highway Projects."

NWF is a nationwide non-profit conservation organization incorporated under the laws of the District of Columbia in 1939. NWF is dedicated to the wise use and preservation of the natural resources of the North American continent. The Federation has over 3,000,000 members and supporters, including its associate members and members of its affiliated clubs in each of the fifty states, Guam, Puerto Rico and the Virgin Islands.

NWF has had a special interest and continuing involvement in federally funded highway projects, particularly as they affect public parks, recreation areas, wildlife and waterfowl refuges and endangered species and their habitat. It has been particularly involved in administrative compliance with Section 4(f) of the Department of Transportation Act, NEPA and the Endangered Species Act. A fuller description of NWF activities in these areas is appended to this statement.

This statement addresses five general issues as they relate to the Federal Aid Highway Program:

- A . Delay allegedly caused by environmental procedural requirements
- B . The role of NEPA
- C . The role of 4(f)
- D . The role of the Endangered Species Act
- E . Certification acceptance

A. The Delay Issue - A Misconception

A principal criticism of the environmental procedural requirements which have been engrafted upon the federal-aid highway program in the past few years is that they cause, or significantly contribute to, "delay" in the planning-approval-funding-construction process. According to varying estimates the "lead time" for completion of a federal-aid highway is presently between six and ten years." The "delay" charge is totally unfounded.

In the first place the "lead time" to which the critics refer does not correspond to the common usage of that term. Generally speaking lead time refers to the period required to complete a project once a decision is made to go forward with a proposal. Critics of the federal-aid highway program, on the other hand, mark the time between the submission of a proposal to build a highway and the eventual completion of the proposed project as "lead time." This calculation reveals an interesting insight into the biased thinking of highway proponents: they apparently assume that every proposal to build a highway must be accepted, and the highway eventually built, in some form or other. This is a proposition to which we who are concerned with intelligent and objective decision-making do not care to subscribe.

* See, Statement of FHWA Executive Director Les Lamb, before the Subcommittee on Surface Transportation of the House Committee on Public Works (June 24, 1975). Note also that a six-year lead time is involved only in "complex" projects and not in the majority of cases.

In practice, of course, once the federal government becomes committed to a proposed highway, by giving Plans, Specifications and Estimates (PS&E) approval, construction may begin almost immediately for the section of highway covered by the approved proposal. If states and highway proponents wish to speed the process of obtaining PS&E approval on eligible highways, the answer is to submit larger segments of a proposed route for consideration, rather than piecemealing them as is the present practice. This might eventually result in complete transportation corridor planning rather than planning by bits and pieces over a long period of time and covering many communities and even several states.*

Another reason why the period leading up to a decision to build or not to build a particular road should not be characterized as "lead time" is the great number of factors which must be taken into consideration before any decision can be made. At one time it may have been entirely consistent with our national policy and societal goals to say "damn the consequences and full speed ahead" in the federal-aid highway construction program. If that was true at one time it is certainly no longer the case. The modern federal-aid highway program is not a single-purpose program -- i.e. the laying down of highways. Few, if any, of our federal public works

* The best example of the "fractional approach" to planning is set forth in the opinion of Judge Oakes in the Route 7 case. Conservation Society v. Secretary, 508 F.2d 927 (2d Cir. 1974); petition for cert. pending.

programs are so one-dimensional.* Presumably the highway program has evolved in this manner because Congress perceived the need for expanding the role of the program for the general welfare of the nation. Unless convincing evidence is put forth to show where the Congress went wrong in making these decisions it is perhaps inappropriate to complain that someone else's interests must be taken into account along with those who like to build highways.

In addition to tending to the competing, sometimes conflicting, interests of those groups within the zones of interest contained in the federal-aid highway program (e.g. relocatees, minorities, laborers, environmentalists, etc.) highway officials are required to identify and evaluate a number of "costs" and "benefits" associated with a particular highway proposal. This task is by no means easy to carry out. Highways generate many and diverse effects, some of which are not always beneficial, and the job of marshalling all the data and accounting for primary as well as secondary impacts is enough to discourage even the most well-intentioned. To honestly and forthrightly evaluate these impacts, particularly the ones which argue against construction of the road, is not a welcome chore to those whose business is to build highways. Yet without this somewhat self effacing endeavor we run the risk of having decisions made on the basis of an incomplete record. If the goal is to make the best possible decision which will benefit the most people without drastic impacts on the rest, then both time and

* For instance, federal water resource development programs have as many as twelve objectives. See, Water Resource Council's Principles and Standards For Planning Water and Related Land Activities, 38 Fed. Reg. Part III (Sept. 20, 1973).

effort must be expended before any decisions are made. It is the unfortunate onus of our species that these rudimentary obstacles to the accomplishment of chosen objectives must be accommodated.

Rather than impede the process of identifying and evaluating all of the factors which go into the decision to build or not to build a highway, the environmental procedural requirements provide an excellent mechanism for gathering the facts and considering them simultaneously. In fact without the impact of the NEPA process which forced agencies to adopt better decision-making procedures, the federal-aid highway program, and others, might be in worse shape than its critics maintain it is today.

B. The Role of NEPA

NEPA is a planning tool, a basic decision-making document, a statement of full disclosure and a record against which a decision can be measured. In the hands of skilled planners the NEPA process can be transformed into the most efficient mechanism for pulling together all of the necessary factors which must be considered by highway officials. In addition, the process affords the officials the opportunity to elicit the views of those who are supposed to be the beneficiaries (and the financiers) of a proposed highway: the public. Perhaps the candid comments of the public concerning a highway proponent's carefully decorated proposal are not always welcome, but they are certainly enlightening. It is difficult to imagine a public servant being reluctant to solicit the opinions of those he serves but perhaps that is too optimistic a notion.

In any event the advent of NEPA certainly changed the way in which highway decisions were made. In the past there was no one document into which all the information was fed, no one point in time at which all the forces were gathered to hash out the pros and cons of a proposal on the basis of a written description of the project, and no record to aid in those reviewing initial decisions (including courts).

Unfortunately the potential for using NEPA as an aid rather than a hindrance to decision making was not fully appreciated by the FHWA or, for that matter, any other federal agency.* In fact, much of the blame for any current problem with the incorporation of NEPA considerations into the federal-aid highway program can be traced to FHWA's stubborn resistance to acceptance of both the policy and procedure established by Congress five years ago. Perhaps if serious efforts to integrate NEPA's enlightened concepts into the highway program had begun immediately the past five years would have seen the development of a model planning and decision-making mechanism. Instead, we have witnessed a period of court battles and bitter controversies in which some of the most straight forward of NEPA's provisions were ignored or misinterpreted by FHWA. In most cases the agency's position was found to be untenable by the courts.**

* See, The Fifth Annual Report of the Council on Environmental Quality, at 372-381 (1974).

** The war between FHWA and NEPA proponents has been thoroughly documented by Frederick Anderson in two excellent works: NEPA in the Courts, A Legal Analysis of the National Environmental Policy Act, (1973); and, Federal Environmental Law, Ch. 4 (1974).

Despite FHWA's intransigence the agency now recognizes NEPA's beneficial effects and believes that most of the "bugs" have been worked out. The following statement by Administrator Tiemann, made to this committee earlier in the year, illustrates the agency's present perception of NEPA:

We believe that the true success of NEPA is measured more in the number of environmentally unsound projects that are never proposed than by the number of projects rejected or changed on the basis of an EIS. By the time a project is formally submitted for Federal-aid, considerable time and effort has been spent and changes are wasteful and difficult. If the environment is taken into account at all stages, project approvals should flow smoothly. Now that we and the States are familiar with the NEPA process, they do.*

Free of self-imposed shackles on the NEPA process, FHWA may now begin to derive even more benefits from the exercise and in the process the Nation's vital transportation systems planning should improve.

C. The Role of Section 4(f)

Section 4(f), contained in both the Department of Transportation Act (49 U.S.C. § 1653(f)) and the Federal Aid Highway Act (23 U.S.C. § 138), declares that it is our national policy that "parklands"*** are off-limits to highway construction unless there is no "feasible and prudent alternative" to their use; and in that event, only where "all possible planning to minimize"

* Statement of Norbert T. Tiemann, Administrator, Federal Highway Administration, before the Senate Committee on Public Works (April 30, 1975).

** Parklands include publicly owned parks, recreation areas, and wildlife and waterfowl refuges; and public and private historic sites of "national, state, or local significance."

harm to the 4(f) area has been carried out. Under current FHWA regulations 4(f) statements are combined with NEPA impact statements (Draft and Final) at the location stage of the planning process.* At this stage several alternative locations are considered, one of which must be approved by FHWA. The location stage comes after the proposed project has been given "systems approval" (i.e., certifying that a route will be on a federal-aid system)** by FHWA and before the Design Stage, at which the engineering standards of a proposed route must be approved.

Lands protected by 4(f) must, according to the U.S. Supreme Court's interpretation of the statute, be accorded "paramount importance." *** Highways may not "use" 4(f) land except in "truly unusual circumstances" as where the "cost or community disruption reach extraordinary magnitudes."****

Because 4(f) represents a Congressional prohibition on the use of protected lands except in "truly unusual circumstances" it becomes necessary to identify potential invasions of such areas at the earliest point in the planning process and to make every effort to avoid encroachment where possible. The location stage may not be the earliest time at which to discuss 4(f) and to publish

* See, PPM 90-1, para. 5 and App. E, and 23 C.F.R. App. A (1972).

** System approval is required by 23 U.S.C. § 103.

*** Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402, 407 (1971).

**** Id., 401 U.S. at 411.

an initial decision regarding the use of 4(f) lands. In fact, serious consideration ought to be given to separating 4(f) statements from NEPA statements, or moving both statements to an earlier point in the procedure, in order to avoid the expenditure of time and money on a route which might illegally "use" a 4(f) area.

There are two things to consider in looking into the possibility of "re-locating" 4(f) determinations. First, it has been frequently held by courts considering 4(f) problems that one "feasible and prudent alternative" is to abandon the route altogether.* Coupled with this is the Supreme's Court's holding that "truly unusual circumstances" must be presented before 4(f) land can be taken. Thus, where there are no alternative locations which will avoid 4(f) land it becomes necessary to decide whether the highway can be built at all**; such a decision ought to be made before substantial amounts of time are spent planning for the route.

Secondly, even where there is no feasible and prudent alternative to locating the highway in the park or refuge or other protected area the road cannot be approved by the Secretary unless he finds that all possible planning has been done to minimize harm to the area. Under DOT and FHWA regulations one possible mitigation measure is "functional replacement" -- i.e. the acquisition of lands or structures to replace those sacrificed to the highway. If

* D.C. Federation of Civic Associations v. Volpe, 459 F.2d 1231 (D.C. Cir. 1972); Monroe County Conservation Council v. Volpe, 472 F.2d 693 (2nd Cir. 1972); Citizens for Mass Transit Against Freeways v. Brinegar, 357 F.Supp. 1269 (D. Ariz. 1973).

** This is a problem encountered whenever a federal-aid highway is proposed on land in national forests which frequently are used for recreation and wildlife habitat.

functional replacement or some other form of mitigation is required it should be incorporated into the schedule for acquisition and design standards for the highway. This will usually mean extra planning which should be completed before construction begins.

If complied with in a timely and proper manner, Section 4(f) should not result in any delay in the highway planning process. It will, however, mean that certain highways cannot be built in certain protected areas. That is an objective clearly endorsed by the Congress and one which we heartily support.

E. The Role of the Endangered Species Act.

Section 7 of the Endangered Species Act of 1973 (16 U.S.C. § 1536) requires all federal agencies to take such action as is necessary to "insure that actions authorized, funded, or carried out by them do not . . . jeopardize the continued existence" of the species listed as endangered or threatened by the Secretary of Interior; or "result in the destruction or modification of [critical] habitat of such species." Where endangered or threatened species are involved, Section 7 imposes even stronger restraints upon highway building than those imposed by Section 4(f). Under Section 7 DOT and FHWA must insure that federal-aid highways do not jeopardize the existence of endangered or threatened species or modify critical habitat used by such species. Strong measures, certainly, but necessary ones if we are to prevent further annihilation of sensitive flora and fauna by the juggernaut of progress.

Congress most certainly recognized the necessity for these restrictions because it did not leave federal agencies any room for discretion. In the course of presenting the Conference Report to the House, Representative Dingell elaborated the intent of Section 7:

Another important step which we have taken in this bill - and in this regard the two bills are virtually identical - is that we have substantially amplified the obligation of . . . all other agencies of Government . . . to take steps within their power to carry out the purposes of this Act (emphasis added). [119 Cong. Rec. 11837 (Dec. 23, 1973)]

Thus, any highway proposal which involves endangered or threatened species habitat should immediately be red-flagged and scrutinized by federal officials to avoid violations of Section 7. As in the case of 4(f) lands, critical habitat must be identified at the first stage of the highway planning process and avoided whenever possible. Yet experience has already demonstrated the apparent inability of federal highway officials to understand even this crystal clear Congressional mandate.*

The important objective of providing good transportation systems, and particularly of building highways, cannot overshadow the equally important objective of maintaining rather than extinguishing our diverse species of animal and plant life.

* I refer specifically to the I-10 project in Jackson County, Miss. which is the subject of pending litigation, NWP v. Coleman, Civ. Action No. J75-129(N) (S.D. Miss. 1975). The following statement appeared in the final Environmental Impact Statement: "At the present time the greatest threats to the existence of the Mississippi Sandhill Crane [an endangered species] are private development and the construction of Interstate Route No. 10." [FEIS at p.28] Despite this candid admission absolutely no steps were taken to avoid or minimize the impact of the road on the Crane or its habitat.

F. Certification Acceptance.

The Ford Administration is presently sponsoring a bill to amend the Federal Aid Highway Act. Section 113 of that bill would turn over to the States all responsibilities under any Federal law or Executive Order, except in the case of Interstate highways, presently discharged by the Secretary of Transportation upon "certification" by the governors of the individual states that such responsibilities would be carried out. The primary purpose of this provision is to dump NEPA and 4(f) responsibilities into the laps of the respective states; however, other responsibilities presently discharged by the Secretary would also shift to the states under the broad language of this bill.* If enacted such a provision would amount to a repeal of NEPA, 4(f), the Endangered Species Act, the National Historic Preservation Act [16 U.S.C. § 470, et seq.], and perhaps other environmental statutes, insofar as the federal-aid highway program was concerned. The National Wildlife Federation is extremely concerned about the reckless manner with which this bill addresses an essentially administrative problem (i.e., "red tape") and is vigorously opposed to any such emasculation of rational environmental safeguards.

Aside from a multitude of drafting errors which, if left uncorrected, could render this bill a nightmare of interpretation,

* These include the Uniform Relocation Assistance and Land Acquisition Policies Act of 1970 [42 U.S.C. § 4601]; the Endangered Species Act [16 U.S.C. § 1536]; the National Historic Preservation Act [16 U.S.C. § 470f]; E.O. 11514; E.O. 11593; and other laws.

there are a number of substantive problems with the bill.

1. Uniformity. NEPA, 4(f) and the other environmental laws affect by this provision established national policies. To be consistent the policy must be interpreted and applied in a uniform manner. If these responsibilities are turned over to the states there is the potential for 50 separate interpretations and any number of applications of each "national" policy.

2. Accountability. If the expenditure of federal funds is to be conditioned upon compliance with federal laws then it is only logical that federal officials retain the responsibility to see to it that such laws are faithfully executed.

3. Bias. This is a particularly acute problem in the 4(f) area. Section 4(f) was enacted for the very purpose of removing the decision to use protected areas from state and local officials because these officials would invariably choose "cheap" public lands from parks, refuges, etc. rather than opt for more costly alternative locations. The legislative history of the statute clearly reflects this predominant concern with local bias.* Returning the decision making power to the states would constitute an explicit repeal of the statute.

Bias is also a problem in the NEPA process. Even FHWA recognizes the necessity for elevating impact statements to the federal level for review and comment to eliminate this element from the process. In the words of Administrator Tiemann:

* See, Gray, Oscar: "Section 4(f) of the Department of Transportation Act," 32 Md. L. Rev. 327 (1973). Professor Gray was formerly director of DOT's Office of Environment, Safety, and Consumer Affairs.

The decision in the Conservation Society of Southern Vermont case [Conservation Society v. Secretary, supra] seeks to circumvent an alleged bias in the State highway agencies. We do not believe this is a serious problem on highway projects since all FHWA statements are circulated for critical comment to other agencies prior to final action. Any lack of objectivity in a draft statement is not likely to escape such multi-agency interdisciplinary review.

If there is no one but the project proponent to review the impact statement and the critical comments submitted thereon, how can bias be eliminated?

4. Manageability. Many states do not possess the administrative infrastructure required to effectively discharge the new responsibilities they would receive under this law. Essentially, the highway bureaucracy which has been created at the federal level will need to be replicated in all states seeking the certification. Whether state highway departments possess the capacity or the desire to undertake this added responsibility is at least questionable at this time.

5. Judicial Review. Where will jurisdiction lie for review of State compliance with these laws? In federal courts, state courts, or both? If concurrent jurisdiction is created should a federal court follow the State's interpretation of the law under the established principle that an administrative interpretation is entitled to great weight?*** How will Governors respond to being sued for non-compliance with federal statutory requirements? Are state

* Statement before the Senate Committee on Public Works, supra.

** C.f. Northern States Power Co. v. Minnesota, 447 F.2d 1143 (8th Cir. 1971), aff'd, 405 U.S. 1035 (1972).

attorneys general prepared for such suits?

6. State Disposition of Federal Lands. Once "certified", State Governors would become the "Secretary" (of DOT) for purposes of making 4(f) determinations, this would have the effect of giving to States the discretion to select highway locations in areas protected by 4(f) and owned by the federal government whenever they determined there was no "feasible and prudent alternative" to such a location. Such authority would have broad implications, particularly in the western states, where a great deal of land with 4(f) character is federally owned (e.g., national parks).

In addition to the problems as noted there is an even more compelling reason for rejecting this proposed amendment: it isn't necessary. In fact, it represents a prime example of overkill. The "ill" to be remedied is the elimination of federal "red tape" to enable highway construction to proceed more expeditiously. It is not necessary to totally abdicate federal responsibility under NEPA, 4(f), et al. to accomplish this goal.

Another bill which seeks to accomplish the same purpose as the Administration's bill (H.R. 3031) adopts a more reasonable approach to the problem. By permitting FHWA to delegate the responsibility for preparation of EIS to the States, but retaining FHWA's authority to review the EIS and the duty to participate actively in its preparation, this bill accomplishes the same goal without opening up the proverbial can of worms which is what the Administration's proposal would do.

Some reference may be made to the certification procedure contained in the Housing and Community Development Act of 1974 ("HCDA") as /a precedent for that which is proposed here. The situations are so dissimilar, however, as to be clearly distinguishable. Under the HCDA, the Department of Housing and Urban Development administers a block grant program whose broad purpose is the distribution of federal money to cities for the construction of housing. HUD acts as little more than a financial institution with only minimal control over the manner in which funds are actually spent. The HUD program does not even remotely resemble the elaborate scheme of the federal-aid highway program with its multiple stages of approval and direct federal control over every aspect of a highway project. Because of the degree of local control the certification procedure contained in the NCDA was developed to effectuate the purposes of NEPA, no to short-cut the NEPA process. In so doing it received the express blessings of the Council on Environmental Quality. No such blessing can be expected in the case of the Administration's proposal.

CONCLUSIONS

On the basis of the foregoing analysis, the following conclusions can be drawn:

1. Environmental requirements are not responsible for delaying the completion of sound transportation systems. To the contrary, they facilitate the decision-making process by marshalling the evidence necessary to a well-reasoned decision.

2. NEPA, 4(f) and Section 7 of the Endangered Species Act represent important rational judgments by the Congress that environmental values should not be needlessly sacrificed to highway construction. To be effective and to eliminate any possibility of delay in the planning process these values must be considered at the earliest possible stage of highway planning. This will probably require plugging these considerations into the systems planning stage, rather than the location stage. At the latter stage a proposed project has gained too much momentum to allow for detached consideration.

3. The Administration's proposed certification acceptance procedure would create more problems than it would solve. It is an unnecessarily harsh measure for a rather standard administrative problem; one which can more rationally be solved by improving agency compliance with Congressional mandates. No amendments to any of the environmental laws is needed to accomplish this, but if they were, we submit that H.R. 3031 presents a less drastic alternative than the Administration bill.

APPENDIX A

Litigation in which the National Wildlife Federation is a party

(1) Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402 (1971) [Secretary of Transportation's duty under Section 4(f)].

(2) Arizona Wildlife Federation v. Volpe, 4 ERC 1637 (D. Ariz. 1972) [Application of Section 4(f) to a forest highway, a de facto 4(f) issue].

(3) National Wildlife Federation v. Tiemann, No. 1270-73 (D. D.C., June 25, 1973) [Agency compliance with public hearings requirement of Federal-Aid Highway Act].

(4) National Wildlife Federation v. Brinegar, No. 1269-73 (D. D.C., June 25, 1973) [Publication of agency regulations for Federal-Aid Highway Program].

(5) National Wildlife Federation v. Tiemann, No. 1318-73 (D. D.C., June 29, 1973) [Agency preparation of environmental impact statements on proposed Federal-Aid Highway projects].

(6) Florida Wildlife Federation v. Brinegar, No. WPB-75-20-CIV-CF (S.D. Fla. 1975) [Application of Section 4(f) to recreation area, Federal-Aid Highway project].

(7) National Wildlife Federation v. Coleman, Civ. Action No. J75-129(N) (S.D. Miss. 1975) [Application of Section 4(f) and Section 7 of Endangered Species Act to Federal-Aid Highway project].

Senator BURDICK. Thank you.

The next witness will be Mr. Les Lamm, Executive Director of the Federal Highway Administration.

**STATEMENT OF L. P. LAMM, EXECUTIVE DIRECTOR, FEDERAL
HIGHWAY ADMINISTRATION**

Mr. LAMM. Thank you, Mr. Chairman.

I am here primarily to serve as a resource to answer questions from the other panelists. My remarks will be very brief.

It struck me, as we have attended many of these hearings in the committee's series of panel hearings on different aspects of the Federal-aid highway program, that regardless of any individual's prime interest, he eventually gets around to talking about Federal procedures.

For instance, back in the hearings on the 18th of July, when the committee heard from urban witnesses, there was a lengthy discussion concerning the need for the Federal Highway Administration to be a little more liberal in waiving engineering and safety design standards in the interest of permitting more highway projects to be improved with the same amount of money.

Then again on the 21st of July, we heard somewhat the same comments from witnesses representing rural transportation. On the 24th of July, there was a considerable degree of discussion about what the Federal role should be and in talking about the Federal role, quite often the discussion got around to the extent to which the Federal Government, particularly the executive branch, ought to be developing regulations, rather than just living with the words of the legislation as they come out of the Congress.

On the 28th of July, yesterday, we heard a number of representatives of safety indicate that from their point of view, the Federal Highway Administration, the Department of Transportation, was not proceeding sufficiently enough down the line of implementing the mandates of Congress in terms of promulgating design standards and requiring the State and local governments to live up to them.

Again, this morning, the panel section spoke on both sides of the same question. The panelists indicated that the procedural requirements are onerous on the part of the States, but on the other hand, they are absolutely necessary to protect Federal interests.

To me, all of this points out that one person's necessary Federal responsibility is another person's redtape. The congressional committees have long had the requirement to determine from among positions espoused by numbers, large numbers of witnesses, what the proper compromise would be and frequently legislation is developed that represents a compromise between a number of competing interests.

In our estimation, the job given to the Federal Highway Administration in connection with implementing highway legislation is just that, to determine what the nature of the compromise has been, what the intent of the congressional committees is and therefore, to continue to strike the same balance in administrative regulations which the committee has struck in its legislation.

I can certainly go into a room and talk with people about whether or not any particular interpretation has actually ended up serving that end, but I would like to assure you and the committee, Mr. Chairman, that the Federal Highway Administration always starts out with the idea that we are in the position of carrying out the responsibilities given us by Congress and, therefore, it is not at all surprising to me that representatives of one particular element or interest in the highway program would react differently to proposals which they see coming from us.

To me, it is a part of the necessary process of developing legislation. We welcome all points of view and try to compromise from among these various points of view.

[Mr. Lamm's statement follows:]

STATEMENT OF
L. P. Lamm, Executive Director
FEDERAL HIGHWAY ADMINISTRATION
before the
SUBCOMMITTEE ON TRANSPORTATION
COMMITTEE ON PUBLIC WORKS
UNITED STATES SENATE

July 29, 1975

Mr. Chairman and Members of the Subcommittee:

The "red tape" present in the procedures implementing the Federal-aid highway program is largely a result of the evolution, over more than 50 years, of an increasingly complex program. In the beginning, the Federal-aid highway program procedures addressed themselves to engineering and fiscal requirements. Federal and State highway administrators were concerned with building the best roads that could be built in a responsible, economical way. Other legal requirements have been added to these original requirements by statute. The Federal Highway Administration (FHWA) has procedural requirements for example, implementing environmental statutes, civil rights statutes, relocation assistance statutes, and minimum wage statutes. Further, while the program started out with one basic objective, to get the farmer out of the mud, there are now many objectives that have led to the creation of many special categorical programs.

The result of these added requirements, objectives, and programs is to greatly increase the time to process or advance projects from planning to completed construction.

Much attention has been given to the problem of reducing "red tape" and thus reducing the time lag on projects from conception to completion. The States, the Congress, and FHWA have all addressed the problem. The States, through the American Association of State Highway and Transportation Officials (AASHTO), have been active in seeking solutions. The Congress has commissioned studies, held hearings, and enacted legislation such as Certification Acceptance (23 U.S.C. 117), to eliminate unnecessary procedural requirements. FHWA has gone through a process of reviewing and streamlining its procedures to reduce paperwork and delays.

FHWA is keenly aware of the need to minimize future "red tape" as new legislation is implemented. In this regard, we will work cooperatively with all interested parties. For example, all draft directives that affect the States will be reviewed by an AASHTO committee prior to issuance.

FHWA has prepared and issued directives to implement most of the Federal-Aid Highway Act of 1973. The only major sections still needing final directives are the system realignment, urban planning, and public transportation sections. These sections are being implemented under interim

directives pending the issuance of final directives. The only major section of the Federal-Aid Highway Amendments of 1974 awaiting issuance of a final directive is the enforcement of the 55 m.p.h. speed limit section. A final rule will be issued shortly (hopefully within one week).

The Administration's proposed 1975 Highway Act addresses the problem of "red tape" and the problem of reducing time lags by reducing the number of grant programs and by expanding the certification acceptance provisions to include all but civil rights requirements. At present, such certification acceptance provisions do not include environmental requirements, civil rights requirements, and relocation assistance requirements. The proposed 1975 Act, if enacted, will help with the "red tape" problem.

This concludes my prepared statement and I will be pleased to answer any questions that the Subcommittee may have.

Senator BURDICK. Thank you.

Mr. Hanson, executive vice president, American Roadbuilders Association.

DANIEL HANSON, EXECUTIVE VICE PRESIDENT, AMERICAN ROAD BUILDERS ASSOCIATION

Mr. HANSON. I have no opening statement, Mr. Chairman. I will just participate in the questions.

Senator BURDICK. I have some questions for the panel. I will be addressing them to particular individuals. The others may comment as they wish. So we will get a balanced view here this morning, if we can.

The first question is to Mr. Nelson. You do not go into great detail in your statement about the delays caused by environmental impact statements. It is obvious that this is a concern of your organization. In general, do you believe this environmental requirement should be relaxed in time of high unemployment and economic difficulty?

Mr. NELSON. This is a question that calls for a compromise answer, of course. Certainly, as Mr. Lamm just said, there are times of compromise on all independent points and when we are particularly involved with unemployment, it appears that there is a timeliness to some relaxation of some of the regulations that might be considered at other times.

Senator BURDICK. Then how do you answer the arguments of the other witnesses that environmental damage caused by pollution and badly designed highways may cost as much in the long run as some of our present economic problems?

Mr. NELSON. I don't necessarily agree that we have or will or are committing long-range damage to many of these things. Long-range damage is the thing that is seen in the long range. Certainly, things that we have said in the past that in our short look at the things will be of long-range, we found out that that hasn't been necessarily proven to be a fact.

There is a compromise here. Certainly, the environment is the place in which the highway, the other transportation facilities are run and certainly there should be all considerations given to realistic approaches to what damage is done to mankind, long-range.

Senator BURDICK. Mr. Lamm, Mr. Schoenbrod has made some charges against the Federal Highway Administration on the implementation of environmental requirements. Perhaps we should give you a chance to respond and then have Mr. Schoenbrod comment.

First he charges that environmental review is placed at the end of the planning process when large commitments of time and money have already been made. Second, he says you allow the preparation of environmental impact statement on small sections of the road, not looking at the entire project. Third, he says that most impact statements are of such inferior quality that FHWA can't really learn much from them anyway.

Mr. LAMM. Mr. Chairman, this is an involved issue. I couldn't begin to cover all of our interests in this matter in a brief response. I would certainly be willing to continue the discussion with any of the other panelists.

Once again, let me start out by stating what the Federal Highway Administration intends to do. Looking at the process chart which Mr. Schoenbrod referred to on the wall, there is a lengthy series of steps which take place before the State highway department actually determines that an environmental impact statement is required.

But in our estimation, the review process that has been taking place up to that time does incorporate the environmental review whereas the block on the chart that talks about preparing an environmental impact statement is the precise need to actually fulfill the reporting requirements prescribed in connection with environmental impact statements.

Prior to that decision, there has been the location study conducted by the State that by our requirements does incorporate the potential environmental consequences and, therefore, by the time the decision is made as to whether or not an environmental impact statement is required, the State is in a good position to make this decision.

I might point out that our current rate of processing of environmental impact statements includes statements on roughly 5 to 7 percent of the number of highway projects which come down through the pipeline in each given fiscal year. The number is decreasing mainly because we have an increasing emphasis on programs, the newer safety construction programs and other programs, which don't require sizable expenditures of dollars on a given project. Therefore, the percentage is getting closer to 5 percent whereas a couple of years ago, it would have been 7 or 8 percent.

In addition to the numbers of projects which require the full environmental impact statement treatment, about 20 percent or so are processed through the negative declaration route. Therefore, about three-quarters of all of the highway projects which were advanced during 1975, there were better than 13,000 highway projects advanced, but about 75 percent of these projects either on their face have little to do with any adverse environmental impact or could not be characterized as major Federal actions. The environmental processing required for this 75 percent is very basic and can be completed without full environmental statement preparation.

With regard to the comment that the environmental impact statements are poorly prepared, I would just point out that from our own reviews, we have determined that year by year, the States' environmental impact statements have improved.

Perhaps you might want to ask the same question of Mr. Hunter a little later. I have complete confidence that the State highway departments are staffing up and are entering into the spirit of the environmental legislation. We can judge that by, as I say, the improving quality of environmental impact statements.

There is certainly some litigation. There has been litigation even prior to the development of the Environmental Policy Act, I believe, in the last 8 or 9 years. We have more than 200 individual highway routes which have been subject to litigation. The number went up immediately after the passage of the Environmental Policy Act.

The rate of new cases, new litigation appears to be declining in late 1974 and so far in 1975, which, if true, over the long run, would again indicate that the quality of the environmental assessment being done in cooperation with the States is improving.

Another of the criticisms was with regard to the segmentation of highway routes. This is an area in which the Federal Highway Administration and the States were getting bombarded very heavily. Again, in the earlier years following the passage of the Environmental Policy Act, there were a number of highway projects which had passed part way through the pipeline represented on that flowchart on the wall.

I would be the first to admit that compliance with the Environmental Policy Act required the States to get involved in preparing an environmental impact statement at a much later stage than would normally have been done. In many cases, there was a commitment to go to construction on a short length of the project and we did have a number of cases which were litigated on the issue of segmentation.

Here again, we feel that as we have developed the experience in implementing the Environmental Policy Act, we and the States have reached the stage where projects are now being reviewed at such an early stage that segmentation is much less of a problem than it was even a few years ago.

Senator BURDICK. Mr. Schoenbrod, since I took your name in vain, do you want to reply?

Mr. SCHOENBROD. I don't think it at all in vain. I think there is some problem with some of these responses I would like to go into.

First of all, taking the segmentation issue first, Mr. Lamm says that the problem has been dealt with. I think the reason it has been dealt with is not through greater experience on the part of FHWA, but because the courts have said that the FHWA has been plainly in violation of the law.

It is not a question of experience. If one read the guidelines—

Senator BURDICK. You say in violation of law. In what regard?

Mr. SCHOENBROD. NEPA requires that the full implications of an action be considered. If FHWA is doing an environmental impact statement on only a fraction of a more major undertaking, they really aren't looking into the full costs and benefits of the projects in the way that the law requires.

This is stated clearly in the guidelines of the CEQ. That was known a long time ago. Unfortunately, we had to go to court to enforce this. That is the reason for the delay. I think the recalcitrant spirit of that situation, where we really had to go to the mats to get compliance, has flavored the whole thing.

As to the quality of the statements, it is ascertained by Mr. Lamm that they have improved. I have figures from EPA from the period—

Senator BURDICK. Would you put that mike a little closer to you?

Mr. SCHOENBROD. I have EPA figures from 1971 to 1973 that indicate that over that period of time, the quality of the statements deteriorated. I would like to note, by the way, that the EPA evaluations of the statements show that the State highest on the list for preparing adequate statements was North Dakota.

Third, I would like to turn to the question of the timing of the process. Mr. Lamm says they don't start NEPA at the time where they decide should the highway be built. That is what the notion behind NEPA is, to integrate environment as a consideration throughout. They start the process really much later, after it has been decided that there should be a highway and its rough location.

Mr. Lamm says instead of complying with this Federal law, they have another process that begins earlier. It seems to me that is the kind of duplication we could do without. NEPA ought to be complied with and ought to start at the planning stage and we would be avoiding some of these delays.

I would like to add a very brief addendum to the comment Mr. Nelson made. He urged loosening the NEPA process in order to spend money. There is a recent report of the Office of Technology Assessment of the U.S. Congress on Mass Transit, Energy, and Employment. It indicates that, if one is looking for quick impact on the employment, mass transit offers a better alternative.

Secondly, Mr. Nelson talks about compromise. NEPA is a compromise measure in the sense it asks for a balancing of the environmental and other actions. But asking Congress to compromise the compromise is going too far.

Senator BURDICK. You talk about the problems produced by mass transit versus highway. Are you thinking of the District of Columbia?

Mr. SCHOENBROD. I wasn't referring to—

Senator BURDICK. That is just an aside.

Mr. SCHOENBROD. It sounds like there is a controversy I am not aware of.

Mr. HUNTER. I would like to comment a bit on this segmentation and the environmental impact statement. I think perhaps some of us are becoming confused with a particular system of highways or a particular program in applying this to the entire highway program as we know it in this country.

I am speaking particularly of the Interstate System, the national System of Interstate and Defense Highways which constitute about 1.5 percent of the total road mileage of the country. As we laid out the Interstate System in any State, in fact throughout the Nation, we have made certain commitments about a system in that State. Perhaps some of the comments on segmentation of these environmental impact statements would be applicable there.

This work has been going on for some time. Some of these requirements are rather late. But due consideration was given to most of these subjects as we proceeded with that development. But I think the vast majority of the highway system as we know it in this country is an existing system. The highway departments are not out there with the idea of creating a highway.

In most instances, the highway is there. Some kind of a road has been built some time ago. It is a part of the State system. It requires improving because of congestion, safety, serviceability. No State that I know of has sufficient funds to embark on the broad improvement of the entire system to the desired standard.

So we have to pick out those sections which have the highest priority and usually those are sections indicating the poorest service rating from that safety, structural stability and so forth. So we precede them with a 5-mile section of a particular route for improvement because it has exhibited the worse condition.

We then must determine what we are going to do to improve that particular section of road. It may be widening and resurfacing. It may be minor bridge replacements. It may be major bridge replace-

ments or it may require relocation in order to meet the geometric standards that we are going to have to meet to serve the anticipated traffic.

All of those considerations up to that point, we do give consideration to some of these things that this gentleman has talked about, but once we reach the decision that we are going to have to study all of these, then we do get into the environmental considerations and write up these statements.

Senator BURDICK. While you are still talking, Mr. Schoenbrod is also critical of other States. He says that State highway departments delegate the preparation of these environmental statements to engineers, not to environmentalists, and that the statements are inferior and self-serving.

Can you respond for Missouri and for other States represented by your organization?

Mr. HUNTER. I think you would expect me to say that just because we delegate it to an engineer doesn't make it bad. We think that engineers are concerned people with the environment and particularly civil engineers. This is their whole role in life, is providing a better country in which to live.

But we do, all States, do call other expertise into the environmental statement preparation and many times, we are queried by some Federal organization about a particular item that should be considered in the environmental impact statement. In those instances, we go to the universities or to special consultants or to others who might have the expertise that we do not have on the staff.

But we do try to give broad involvement with many disciplines in these environmental impact statements. We are as concerned about the environment in our States as anybody that I know of.

Senator BURDICK. In other words, your answer is that you believe Missouri has the ability or can get the ability to do the job?

Mr. HUNTER. Yes, sir. We either have it or will get it.

Senator BURDICK. Let me quote you a statement from—this is to Mr. Lamm and Mr. Hunter—of Mr. Schoenbrod's remarks. He says,

"Without Federal review, a State prepared environmental impact statement will reflect self-serving assumptions * * * (which) exists by virtue of the fact that it is a State highway departments' function to build highways."

What he is saying is that the person whose job it is to build the road cannot be objective about its environmental impact. Can you comment? You may have touched partly on the answer. Would you care to add to that, either one of you gentlemen?

Mr. LAMM. Mr. Chairman, I will speak to that with regard to the connotation concerning one of the elements of the administration's highway proposal this year. The comment came up in the critique of the administration's draft 1975 Highway Act which would permit certification acceptance to be extended to incorporate the procedures of the Environmental Policy Act.

Here again, we were faced with two apparently somewhat competing responsibilities imposed on us by Congress, both in the past few years. One, of course, is the requirement to make certain that all highway projects that are proposed relate to the environment, relate to and abide by the environmental concerns and constraints which Congress has enacted.

The other is the provision that has been expressed by Congress several times, that Congress recognizes the need to reduce the amount of procedural requirements that are imposed on highway departments.

Every time Congress debates highway legislation, the States come in and have a longer amount of current leadtime to talk about it. Here again, we have tried to strike a balance. We would not, for instance, 2 or 3 years ago have proposed that certification acceptance be extended to incorporate the Environmental Policy Act procedures.

However, in the last few years, I did mention that we feel the States have, through the adoption of the action plan requirements and through their own staffing up to take care of the environmental requirements, developed a better capability now than they had a few years ago.

Another development has been the enactment in many States, particularly the larger and most urbanized States, of State legislation which in effect represents a little NEPA which presents the same safeguards and requirements on individual States that the Federal legislation does on a national basis.

So in our estimation, by returning some of the actual responsibility to the field, to the State highway departments, we are recognizing the fact that they are better equipped through State requirements than they were a few years ago.

Mr. HUNTER. I would like to say that some of these considerations have been going on for a number of years, long before they became Federal requirements. I think we should all realize this.

We are accused of being biased. Yet, I understand and I heard this at a meeting in Cleveland several years ago, that Missouri was the first State to develop a joint expressway plan in the city of Kansas City with the city and the Federal Government. This involved the art commission, the planning people and a lot of other people in laying out that expressway system. A lot of good, intelligent discussions and give and take on the part of all concerned took place.

For years in Missouri, long before this ever became a requirement here, we have shared our highway program with our conservation department, asked for their input on projects that we had scheduled for improvement in order that we plan this in keeping with their programs.

We have not the money, again, to build as many improvements as we see needs for out there. So you have to realize that many of the projects on the programs are and have been for years of interest to the local people, the cities, the rural people who want this section of road improved. They have had input to the development of this on the program from the very beginning and have again for a long time.

We talk about bias. We have a freeway in Kansas City that is now in the process of litigation by a so-called environmental and civil rights group. The gentleman who came into our office several years ago, introduced himself and identified himself as one whose role was the stopping of public works projects and particularly highways, he asked to see our files. Then recently he came back and he and another man from back in the eastern part of the United States, and the people from California were the primary movers in that lawsuit. It was not a local involvement at all.

If we are biased, then I don't know what term we would use for these people.

Mr. LAMM. Mr. Chairman, I would like to amplify my comment concerning the administration's legislative proposal this year, particularly as it relates to certification acceptance of NEPA requirements.

The legislation provides for continuation of the Federal role in the review and approval of interstate projects and the delegation of non-interstate decisionmaking to the State and local agencies ought to be taken in context with the other provisions of the administration's bill which call for a different method of financing of the interstate and noninterstate programs and in general, a much larger anticipated role on the part of the State and local agencies in connection with every element of the noninterstate highway programs.

But in connection with the interstate system projects which are generally the ones which are more likely to run into problems from an environmental point of view, we would retain the Federal review and decision.

Mr. PARENTEAU. Mr. Chairman, if I might, I would like to followup on some of Mr. Hunter's remarks. First of all, I wholeheartedly agree with him that in certain States, State highway departments and officials have not only the capacity, but the intention to fully evaluate their projects in light of environmental standards and protection of critical environmental areas. But it is because it is a national program that you have problems of diverse opinions as among the several States.

It is for that purpose that you need a Federal oversight. Not every State is as well intentioned or as capable as the State of Missouri, perhaps.

I can think of a couple of specific examples where the States were bound and determined, come hell or high water, that they were going to put highways through parks, even though courts and Federal officials had told them they couldn't. I refer specifically to the Overton Park controversy and the Brackenridge Los Alamos controversy in the States of Tennessee and Texas, respectively.

I think those are the kinds of examples that have to be cited whenever the suggestion is made that Federal responsibilities be turned over to the States; but at the same time, I encourage and I am happy to see those States take a more active role because it is, after all, State programs. The Federal-aid highway program is a State program, although it is obviously subject to elaborate Federal review and approval.

Projects that are submitted to the Federal agency that are submitted in a manner that evaluates honestly and forthrightly the adverse impacts as well as the beneficial impacts of a proposed project are to be applauded and any efforts that the States can do to improve that submission, both in terms of timing and content of the projects that they submit is to be heartily encouraged.

With respect to the problem of bias, it is obviously a rather explosive issue. There is no question that those who oppose highway construction have a bias, nor is there, in my mind, any question that those who propose highway construction have a bias.

The job of NEPA is not to place value judgments on projects. The job of NEPA is to put all the cards on the table so that when a decision is made, it is made with full knowledge of all of the effects, good and bad.

While I do not necessarily agree with persons who walk into a highway official's office and say that their mission in life is to stop highway projects, I think it does illustrate that there are adversaries in this program and that the views of those adversaries have to be evaluated by some, hopefully, objective third party. In the case of the Federal-air highway program that "somebody" is the FHA and DOT.

I would also like to, as long as I have got the mike at this point, just toss out a couple of things with regard to the segmentation and the timing of the EIS. Let me take the timing issue first.

The very first Federal approval in the Federal-aid highway program comes at the systems planning stage. That approval is required by the Federal-Aid Highway Act. That, in our estimation, is a major Federal action for which an EIS ought to be prepared. The EIS at that point may not be complete. It may have to be supplemented. It may have to be developed throughout the planning process, but it ought to begin here. That means at the first stage, not 34 months later, at the location hearing stage of a project, where an EIS is presently prepared.

Some of the projects, the great majority, according to Mr. Lamm's testimony, do not require impact statements. When a project is not going to require an impact statement, is not going to encroach on a 4(f) area, is not going to jeopardize endangered species, is not going to destroy historic areas, those facts should be addressed immediately. They should be publicized in an EIS so that the public can see it and understand that they are not involved and then the highway officials move forward with the planning and construction of the highway.

But these considerations must not be swept under the rug until the location and design hearings are held when, in a muffled tone, it is said, "By the way, there is a historic property involved in this case or there is a potential impact by an interchange on a park."

With regard to segmentation, Mr. Hunter raises a very troublesome and, I think, a good point, which is, that many of these highway systems were planned long before NEPA and other environmental statutes came along. This problem is involved in many programs.

As we grow and evolve as a people, and as we place different values on different things, it sometimes becomes necessary to reevaluate decisions that were made in a darker era, if I may make a liberal use of that term. It may be the one time that we had the type of philosophy that highway construction should be completed and fostered at all costs. I don't think that is the case anymore.

In fact, few, if any, Federal public works projects are so one dimensional that they have only a single objective in mind. Congress is trying to achieve a number of objectives in the Federal-aid highway program. All of these various interests are difficult to account for, yet they must be.

To try to wrap this up, we believe the segmentation problem stems from the submission of little pieces and sections of highways by States where, in fact, the section is only a part of a larger regional plan or transportation corridor.

A recent case which has generated much of the present controversy, the Route 7 case in the States of Connecticut, Massachusetts, and Vermont, is a prime example of the segmentation problem. There, several different State highway officials were working in a narrow area without fully understanding and addressing the impact of a larger project. I think those are the kinds of projects that have to be evaluated and, indeed, submitted to the Federal Government as a unified program.

Senator BURDICK. I have a question that I want to ask Mr. Schoenbrod and Mr. Parenteau. The road builders' testimony indicates that it is important that highway projects be built within a reasonable time-frame. Is it your contention that the time factor involved is secondary to environmental considerations? Which is most important in your opinion?

Mr. SCHOENBROD. I didn't understand the question in terms of which was more important than what?

Senator BURDICK. Is it your contention that the time involved in highway construction should be given primary consideration even if it means less emphasis on environmental considerations? How do you equate the importance of the two?

Mr. SCHOENBROD. I think they are both equally important. I think it is a question of how one looks at the time. I could readily understand the frustration and the concern about the economic loss when one is ready to go ahead with any kind of undertaking and when one is frustrated.

But the point here is that the decision that the highway officials are ready to go ahead takes place before the environmental questions are publicly reviewed. The law says, and what good sense says, is you shouldn't decide to do something if you haven't looked at one of the most major considerations.

Senator BURDICK. That leads to the next question. One of the complaints lodged with regard to environmental requirements is that there are too many public hearings required. The building and construction trades particularly have called for a consolidation of the hearing process.

In your view, should the hearing process be left alone or are there things we can do to improve it? Can we have two or three of these hearings at once or should we spread them out over a period of time? Is there any way we can improve that?

Mr. SCHOENBROD. I would like to be able to submit something in writing after the hearing on the question. But my understanding is that as to the environmental factors, there are two hearings. One has to do with the general location and one has to do with the final design.

It seems to me there ought to be a public hearing at both of those stages, but I don't think that two hearings is too much for a project that costs many hundreds of millions of dollars which will last for decades and will shape a region.

Senator BURDICK. I want to ask you all a question based upon some personal experience. I have been trying to clean up a rotting lake for 8 years. I started before EPA. I am still there. I know something about hearings and delays.

I don't think there is any disagreement at this table today about the desire to protect the environment. But how in the world do we get away from these delays?

Regardless of where it is, you have delays. I have talked to a great many contractors. They start out with the application. There is no change from the time they start until they get approval. Is there some way we can arrange this thing so we don't have to wait 3 years?

Mr. SCHOENBROD. Mr. Chairman, I was personally involved in a similar kind of question when I was working in the area of electric power and the environment with the city bar association. We were looking overall at the kind of question of how you site powerplants and still look at the environmental issues.

I think the basic conclusion of that committee is very applicable here; that is, that again and again the same issues are considered at separate hearings over and over again, throughout the country and very often with regard to the same project many times. The conclusion the committee reached was that some of these issues should be gotten out of the way once and for all, generically.

I know the AEC in regard to the powerplants has moved somewhat in that direction. With regard to highways, I think that that is why I was emphasizing so much section 134 because that is the vehicle for generically looking at the transportation pattern for a region.

You can make some basic decisions as to what the transportation for that region should look like, to develop some data that will show what various strategies will do to the area. Then you can go from there. You don't have to keep looking at that over and over again.

Senator BURDICK. Just to give you an illustration, you have Project *x* and you put it in particular form and you go through hearings. You came out with the approval but also with identically the same form as you started except there is just a lapse of years.

I think this is the complaint that most contractors and people in public works have.

Mr. HANSON. Mr. Chairman, there is a lot of testimony that took place earlier today and earlier hearings on this certification acceptance plan.

It was a better mousetrap that was built into the 1973 Federal Aid Highway Act and, unfortunately, it didn't work the way this committee and others had hoped it would.

It is our understanding that AASHTO and the Federal Highway Administration have worked out a revised approach to this. We commend the portion of legislation that the Department of Transportation has submitted in this regard. We don't necessarily endorse some of the other provisions of that bill.

But we do think that the CA procedure that is in the law and evidently will be amended somewhat this year does provide a vehicle for the Federal Government and the States to eliminate some of these delays and certainly ought to be expanded to other areas of the program than just the secondary road plan.

Second, this situation that relates to projects of the same type, in the same State or in other States, jobs like topic projects or intersection improvements.

If you have seen one, you have almost seen them all.

They are being built within the existing right-of-way that was acquired years and years ago.

There is no attempt in most cases to even take down a tree or to remove anything other than to make some safety improvements, channelization or lane widening within the existing right-of-way.

If that is the case, we would hope that projects of the same type could be treated in the same way.

If you described this project or the type of intersection improvement and find that it poses no problem to the environment, then we would hope that all improvements of this type could be approved as so-called class exemption.

We think that there are so many of these and they take up so much time and cost so much money that particularly the county governments, for example—they have testified to this—feel that many times it isn't even worth the price of going through the Federal procedures because of not only the added delay, but the increased cost.

We hope that expanding the certification acceptance plan and also by having class exemptions for minor improvements within existing rights-of-way could be handled more expeditiously and cut down the time lag that is shown on that chart on the wall.

Mr. HUNTER. I would like to say we think the fallacy of the two hearing requirements is that it is applied as a blanket requirement too much. You have to have two hearings on most of the projects or too many of the projects.

On many of the projects it isn't needed. In fact, the people out there who you call in for the public hearing want to know why you are out there again to talk to them. They thought everything was settled and we are going ahead with this project.

We objected to this when the people here in Washington wanted to instigate this two-hearing process. We maintain that the formal public hearings is not the answer because we had for a long time been having as many as 50 to 100 meetings with neighborhood groups, with art commissions, with all the people in that urban area on highway projects.

But these are not a stilted, formal recorded public hearing.

They are a meeting in which we can share ideas, get input as to how the plan ought to be modified or developed.

So I think that one formal public hearing as now required is sufficient. Certainly we ought to understand that many additional public meetings are held with various groups in that community.

As far as the time delay goes, I think the most serious thing is that we don't put a limit on the time of review.

We have two projects in Missouri that cleared everybody. There was no local opposition at all. There was no dissension at all within the State.

There was none in the Federal Highway Administration. The Environmental Impact Statement went on to the Department of Transportation. One of those statements rested there for 10 months. Another one a year. Both of them very critical projects. One is going to require substantial work and it will take 7 years to build. But we could not get a comment out of the Department of Transportation as to requirement for additional information, dislike of the statement as prepared, nothing.

Neither could our U.S. Senator or the Governor's office or other people in that major city contact the people responsible for moving that one way or the other.

I think this is the serious part. We ought to establish some way of a deadline for comments, for requests for additional information, or what have you, and get it either turned down or approved.

Senator BURDICK. Mr. Parenteau, as I recall your testimony, you thought the delays were with the agencies. What do you recommend we do about the delays caused by the agencies?

Mr. PARENTEAU. Whip them into shape, I hope.

Senator BURDICK. You had better be specific.

Mr. PARENTEAU. You might consider arranging a panel of FHWA and DOT officials in front of you and start by questioning them on how they are presently complying, in practice, with environmental requirements. Find out whether it is really the environmental requirements which are causing problems or whether it is some of the other requirements contained in the statutes. Second, initiate some form of efficiency investigation into internal agency procedures, regulations, and directives, to see where there might be overlap.

Senator BURDICK. Take my earlier example. Here is pollution growing every day in a lake. This isn't a case where you are trying to prevent discharge violations before the fact. The fact of pollution is there. Every day that goes by, the scum gets greener and greener and the lake gets dirtier and dirtier. Yet, for 8 years I have had nothing but problems solving the situation because of regulations, because of hearings, rehearings, and everything.

So I can see how a contractor gets sort of frustrated. There must be some way to get through that knot. There must be.

Mr. PARENTEAU. This may not be the answer but one of the things you have to look at is the process used to arrive at a decision in these cases.

If you can once get a final decision made then the remedy can come rather quickly. But arriving at a decision seems to be taking the most amount of time.

It is for that reason that we submit that you have to place environmental considerations earlier in the process and get them in as quickly as possible to decide, No. 1, whether you have adverse implications and; No. 2, how are you going to deal with those implications.

If you can get it in at the earliest stages of planning, then, when you do make a decision, you don't have to redo the decision because the environmental impact was ignored.

In some situations, however, where the project naturally has a long lifetime, there may be a need to reevaluate earlier decisions, but that is a fact of life which we must simply live with.

Unless there is a significant change in the record upon which a major decision is made, agencies should be able to go forward with a project. That may mean cutting out a hearing. There is nothing particularly sacrosanct about the two-hearing process.

I would be the first to say that if it is superfluous, get rid of it. If there isn't a long time lag between location, approval, and design approval, or some other change of circumstance, there may be no need for a second hearing.

I would also concur with Mr. Hunter's statement that it is not always the formal hearing process that does the most good. Sometimes more good can come from grassroots contact with the people and getting out and walking up and down in the neighborhood that is going to be potentially affected, or having townhall meetings; that may be more effective.

It may well be that we should, in an intelligent manner, give the States a freer hand to evaluate environmental impacts and make recommendations to the Federal officials, and then get the Federal Government into the posture of being able to quickly take in those recommendations, evaluate them and get a final decision back to the States.

Senator BURDICK. That is precisely what has been recommended here today.

Mr. PARENTEAU. But not in the method I would subscribe to; that is, turning it over entirely to the States without any form of Federal review or veto power or approval, on a project-by-project basis.

Mr. LAMM. Mr. Chairman, on that point, the point of required public hearings we have within the last few months modified our procedures so that we do not automatically require two public hearings as we did during the period 1967 through 1974.

We do now permit and encourage the type of activity which Mr. Hunter is talking about to be accomplished by the States, namely, a lengthy and protracted series of public meetings with the people who are most intimately concerned with the highway projects followed perhaps by one formal public hearing. We are the first to admit that the public hearing mechanism in the highway program and in the reports I have seen on other public works activities as well is just not the best method to obtain public involvement in a process.

Therefore, this problem is not right now a major handicap in States advancing the projects.

I ought to go on also and mention that we have traditionally tried to conduct on a continuing basis a review of the procedures that we issue and the impact on the highway program.

I mentioned before that we try to tie the procedures to the legislation to make sure that we are not out in front in any direction which Congress didn't intend. But we also try to observe the impact on the States and the localities of individual requirements.

If they turn out to be unwarranted and if simplification is permitted within the legislation, we frequently simplify it. We are forever modifying our regulations.

Some of those modifications actually result in less paperwork and fewer restrictions.

I would also like to comment on Mr. Hanson's remark—I appreciate his support of the certification acceptance provision—but I do want the record to show that the administration bill was developed wholly within the executive branch of the Federal Government.

There was no State involvement. Perhaps AASHTO would have been happier with the product if they had a more meaningful involvement; but, at this point it represents an administration proposal to take care of the highway program for the years 1977 through 1980.

One further item I mentioned in connection with the discussion we have had on several points this morning is on segmentation. All of us

would agree that one 2-mile highway project, that in effect leaves no alternative but to continue building the highway, is certainly not a project that can be considered by itself.

You do need to consider the full length of highway that you would be proposing to deal with.

However, on the other hand, you have the highway system that may take 40 years or more to completely bring up to a level of standard.

In dealing now in 1975, you may not be certain about your plans in the year 2000. We have tried to strike a balance between the need to consider a long enough section of highway to really involve the environmental concerns and the need to consider a length which can stand as a usable project by itself, such as a bypass of a small town or, using the interstate system as an example, if a segment of Interstate 94 in the Twin Cities region, Minneapolis-St. Paul, is in some environmental problem there is no reason that North Dakota, for instance, should wait to close its final gap on I-94 until the issue in the Twin Cities is settled.

So we do try to strike a balance between the desire to avoid segmentation for the sake of segmentation and the need to keep the entire program going without holding up a project waiting for a nationwide program to be eventually completed.

Senator BURDICK. I wish you would say a few more words about this theory of certification of the States. Would it deal only with procedures or would they have to adhere to the same standards as the Federal law requires?

Mr. LAMM. It would not relieve the States of any requirement, Mr. Chairman. What it would do basically is to keep the State from coming back to the Federal Highway Administration at 15 different points in the development of a typical project and obtain our intermediate approval of the work that has been going on up to that stage.

In other words, the State would continue to have the responsibility for carrying out the requirements of the Federal law. They would also have the authority to sign off on it once the requirements were completed.

Senator BURDICK. Who would determine in the end whether or not those requirements had been met? Is there any oversight by the Federal Government?

Mr. LAMM. Yes, sir. There is a level of oversight. I feel certain that any State highway or transportation agency director would know that we would not be proposing a procedure that would totally divorce the Federal Highway Administration from the projects as they develop.

Our review, however, would be a review of the procedures that are used within the State rather than an actual project-by-project review on 100 percent of the cases. We would use our field staffs to continue working with the highway or transportation agencies.

Our right-of-way people, as an illustration, though, would be working with the actual process that the State uses to acquire right-of-way rather than going out and spot-checking appraisals on a project-by-project basis.

Senator BURDICK. Would the Federal Government have that review authority of the States actions? Would that save much time?

Mr. LAMM. It doesn't particularly save too much time. A lot of time would be saved if the State did not perform the function to begin with.

But what we are dealing with here is to eliminate the repetitive Federal review and approval process. That, in the course of the typical life of the developing of a highway project, is only a small amount of the actual time which is required.

The end result of certification acceptance in terms of reducing the actual process of developing the project, in my estimation, would save some time, but perhaps not as much as many States and local governments would estimate.

Mr. SCHOENBROD. I think this is an important point. Certification acceptance wouldn't save much time and it also wouldn't cut out any public hearings, but the thing it does is to turn over decisionmaking responsibility from an organization which is supposedly objective in doing these things to one of the parties of controversy.

I think that given the purposes of NEPA that is a very destructive move to make.

Senator BURDICK. Doesn't a State have to make these decisions in the parameters of certain requirements?

Mr. SCHOENBROD. But the thing is that the Federal review, as Mr. Lamm indicated, in his past experience under section 134, indicates the Federal review is a review of papers. You have a checklist. I have seen Federal agencies do this. You have somebody sitting there saying I have got this one, and this one, and this one. But there could be the most flagrant violations of substantive standards.

One example here, an article in the Washington Post about a highway in Tucson which is called locally the Job Freeway. Its destination was abolished. It is proposed to be built in 1977 to create 122 temporary jobs, a very large expenditure of Federal funds.

I can understand why the people in Tucson want to build it. They want more jobs. The highway unquestionably has to be environmentally nonproductive and a bad use of Federal money, because it doesn't have any destination. But under this new kind of system, whether it was this kind of abuse or whether it is abuse of 4(f) in terms of parklands or whatever, it wouldn't be any real review of that by somebody other than the advocate for the project.

I think that issue of who takes the responsibility for the use of Federal money which the Federal Government says has to be spent on highways is an important thing. I think it is a separate issue from hearings and your lake.

I think the question of who decides could be dealt with separately from whether or not there should be hearings. The need for hearings has to do with how big the project is and whether there is something in controversy about it and as Mr. Lamm has outlined, the new Federal regulations on hearings allow for hearings to be done without altogether where there is no important controversy.

I think the difference between your lake, the reason why your lake probably shouldn't have hearings, but the Westside Highway should, is because you are talking about the project in New York City which isn't going to be cheap and is controversial.

The only way of dealing with that situation is to have hearings.

I think the issue of who is going to be responsible can be separated from distinguishing the situations that need hearings.

Mr. PARENTEAU. Although Mr. Lamm does indicate that the administration's bill does contemplate Federal review, the actual language of the certification acceptance provision of the administration's bill does not say that. There is no mention of the Federal review in section 113, which I suppose just leaves it open to a question of interpretation, but one which should certainly not be left open.

Again, in the Housing and Community Development Act of 1974, which contained the so-called certification acceptance procedure, that provision was carefully spelled out setting forth Federal standards, detailing the requirements that were to be satisfied by the States, and ending with the requirement that the certification had received the imprimatur of the Council on Environmental Quality. As I understand it, CEQ may not be willing to give a similar approval to the certification procedure proposed in the administration's bill.

So what I am saying is that the law that has been presented doesn't do what the proponents say it is going to do.

Senator BURDICK. But, counsel, it is another matter for us to put it in there if you think it is necessary.

Mr. LAMM. I think even more than that, Mr. Chairman, the 1973 legislation which your committee passed, dealing with certification acceptance in the first place, carried the same language as the administration's bill this year.

It was left to the FHWA interpreting regulations to require the degree of subsequent review of the process which the regulations have done.

Senator BURDICK. I guess one way or another we have touched most of the issues. But one question to Mr. Hunter: Did you tell us whether your organization has gone on record in favor of the administration's specific proposal of returning many of the procedures you mentioned back to the State Governors?

Mr. HUNTER. Yes. We would like very much for the procedures to be turned back over to the States. We have operated under a secondary road plan which is similar to the certification acceptance plan. The risk you have and the hammer that the Federal Highway Administration has is if in the process of carrying out this particular project you fail to meet the standards or the requirements that you have agreed to meet, then you don't get the Federal aid. You are not reimbursed.

I am sure all of you know that we spent the money first. We paid for the project. Then we applied for reimbursement.

So we think a lot of these procedures could very definitely be handled by the State.

Senator BURDICK. Then your organization does support this feature of the bill?

Mr. HUNTER. Of our handling it, yes.

Senator BURDICK. We will accept for the record the statements of R. S. Buzard, vice president of engineering and logistics, for Vought Systems Division, and vice president of LTV Aerospace Corp. in Dallas, Tex., Sierra Club, and the Council on Environmental Quality.

[The statements referred to follow:]

STATEMENT OF

R. S. BUZARD

VICE PRESIDENT OF ENGINEERING AND LOGISTICS
FOR VOUGHT SYSTEMS DIVISION AND VICE PRESIDENT
OF LTV AEROSPACE CORPORATION IN DALLAS, TEXAS

ACCOMPANIED BY DICK CONDREY, DIRECTOR OF ADVANCED GROUND TRANSPORTATION AND KEITH KAHLE,
CONSULTANT TO VICE PRESIDENT, VSD

July 28, 1975

Good morning Mr. Chairman and Members of the Committee. My name is Robert S. Buzard. I am Vice President of Engineering and Logistics for Vought Systems Division of LTV Aerospace Corporation at Dallas, Texas. In this capacity I have also been responsible for the Dallas/Fort Worth Airport AIRTRANS program, the DOT/AMTRAK Metroliner Truck program and other Vought R&D activities in the ground transportation field. We at VSD appreciate this opportunity to share our experience in mass transportation with you.

In the time allotted, I will review the AIRTRANS program and include a short movie showing it in operation and relating its development to our other aerospace products. I will then discuss what we consider to be the main purpose of our presentation - the issue of how best to direct and fund the research and development aspects of a national ground transportation effort and how a development program building on our existing AIRTRANS system can accomplish the objectives of producing Automated Guideway Transit technology that is usable and deployable for our urban centers, as may be determined by the Department of Transportation.

In 1971 we competed for and won the contract to design, develop, install and maintain the people and cargo moving transportation system for the new D/FW Regional Airport. It was a tremendously ambitious project since it was to be the world's first fully automatic, network type, transportation system and was to be completed in a little over two years.

AIRTRANS is at the center - the nervous system, so to speak - of one of the world's most massive and complicated construction jobs. Creating it was somewhat like playing a football game with all the fans on the field. And the opponent was time.

AIRTRANS has some start-up problems, and they are best understood by reviewing what the system is supposed to be and where it is today. AIRTRANS is essentially an automated one-track electric train designed to move 9,000 people, 7,000 bags and 60,000 pounds of mail per hour.

It consists of 13 1/2 miles of U-shaped concrete guideway, 51 passenger vehicles, and 17 utility vehicles for baggage, mail, supplies and trash. Its 53 stations for handling people and materials are equipped with automated graphics, conveyors, and uniquely designed containers.

Also included are a central control room, a computer system and 71 switches through which the vehicles operate in traversing the 17 programmed routes that serve the airport's needs.

The trick, then, was simply to make all these work together, and the fact is it hasn't been simple at all. Automation and the attainment of equipment and subsystem reliability were the main challenges in the development of AIRTRANS. We were initially optimistic with regard to the amount of testing and debugging required to achieve the current level of performance but, outside of this expensive miscalculation, the program can be considered very successful.

The original contract between our company and the Dallas/Fort Worth Regional Airport was for approximately \$35 million. A federal grant contributed approximately \$7 million of this amount. The airport schedule delays and unforeseen system problems resulted in an overrun. In fact, LTV Aerospace has written off approximately \$24,600,000. There is a claim pending for some of this overrun. However, AIRTRANS is an excellent example of the experience of a private enterprise in a major mass transit new technology development program. LTV Aerospace has more than paid its entrance fee into mass transportation and has developed a fixed guideway system resulting in a very solid product line on which to build a practical, faster, people-mover system applicable not only to airports but also intra-city and inter-city. Future development funding needs to come from other sources.

As of today, AIRTRANS has operated 127 days without interruption. Since the Airport's opening on January 13, 1974, the system has carried over 4,400,000 passengers, traveling 5 million miles on its 13-mile guideway system. This represents a major achievement in reliability and dependability! Running 24-hours a day in revenue service, every day of the week, AIRTRANS is demonstrating that automated guideway transit can in fact be a viable answer to the public transit needs of today.

To conserve time, I will not attempt to describe the details of this system to you -- but will take eight minutes to show you a color, sound film of AIRTRANS as it is operating today for the public's benefit.

(Color, sound film of AIRTRANS)

After viewing this movie, I hope you understand the type system we are describing. It is not a simple pump or shuttle as seen at other airports or amusement parks, but a full-blown, sophisticated, automatic transportation system that embodies all the elements and technology needed for urban deployment and use.

In this connection, a team from UMTA in the Department of Transportation is currently conducting a study of AIRTRANS to evaluate its achievements and assess its potential for early urban deployment.

Now let me change the subject somewhat. VSD entered the ground transportation field because we felt that our aerospace experience in applying high technology concepts to complex hardware systems was needed in solving the nation's transportation, environment, and energy problems.

The normal pattern of technical developments has been a gradual evolution over many years - ice boxes into refrigerators into combination self-defrosting refrigerator-freezers with drink and ice dispensers. Horse drawn vehicles gave way to early horseless carriages and then to the modern auto with air conditioning, cruise control, automatic transmission, stereo tape decks, and

automatic seat and window controls. Even traditional mass transportation vehicles like the railroad cars, buses, trolleys and subway cars have evolved their components and improvements gradually over many years.

The unusually rapid technical advances in the aerospace field over the past 35 years resulted from the Government-funded R&D head of steam generated by World War II, the Manhattan Project, Sputnik, Mercury/Apollo, and the C-5A. Commercial applications of the resulting technical breakthroughs have been many and we are still reaping the benefits in new products being introduced today: the mini pocket-sized calculators are just one example.

This aerospace technology pace cannot continue; it has already slowed down. Neither the need for giant steps nor the R&D funding to accomplish them exists today. But we have come to expect these kinds of technology advances as a matter of course - we take it for granted that they will continue and that all our problems will be solved by appropriate technology miracles. What we don't readily see is that the normal process is a slow evolutionary one with careful testing of new items before they are made available to the mass market. How you cope with the non-recurring cost of these technology developments in a non-aerospace, non-military situation is another problem, particularly with regard to mass transportation. The using communities cannot each be expected to deal with this issue. It must be approached from a national viewpoint. We as a nation are looking for high technology solutions to our mass transportation needs, but the only way we are going to accomplish this is through a structured, federally funded R&D program.

Let me illustrate what I mean by using as an example the A-7 light attack airplane we produce for the Navy and the Air Force.

Our current models, the A-7D and A-7E, represent a vast improvement over the A-7A that made its first flight in 1965. The producibility, the reliability and the operational effectiveness of today's models results directly from the evaluation and technology development, or R&D, that is constantly going on in our defense procurement process. The A-7D and E could not have reached where they are today without this constant R&D.

To continue our analogy with aircraft, we have completed AIRTRANS-A. The question is how do we move on to AIRTRANS models D and E? In the time this system has been in operation at the Dallas/Fort Worth Airport, we have found answers to many critical technological and operational problems. But how do we prove out these answers and evolve them even further for additional advantages?

With specific regard to this AIRTRANS system, the D/FW Airport installation has the potential of being used for national transportation development purposes. A program can be structured to address evolutionary improvements which can be tried out on a non-interference basis at the airport. This would then benefit future expansions of the system as well as demonstrate and debug evolutionary improvements to people moving systems for the incorporation into existing or future applications in support of other communities. This improvement program would look at concepts that reduce initial equipment cost, save on operating expense through simpler maintenance or increased reliability, increase public

acceptance of automation, and facilitate more universal application of proven systems. Some of these concepts are:

1. Improved control systems using digital and micro-processing techniques.
2. Improved passenger communications.
3. Power collection improvements for higher speeds.
4. Steering and switching improvements for higher speeds.
5. Improved traction in adverse weather.
6. Lower cost guideway fabrication, currently \$5M to \$8M a mile.
7. Introduction of demand systems for improved service.

Mr. Chairman and Members of the Committee, in addition, we would suggest for your consideration as the committee reviews improvements in the National Mass Transportation Act of 1974, consideration be given to increasing the emphasis on requiring the Secretary of Transportation to engage in structured research, development and demonstration projects such as I have outlined for AIRTRANS. We would especially stress the present law be amended to include the provisions of the previously considered HR 12859 such as Section 514 dealing with research, development and demonstration and Section 504 which deals with the funding of Section 514 and other activities through a 3 3/4 per centum of all sums authorized.

Public transportation will require continued research. Regional and municipal transportation authorities cannot be expected to pay for the development of new transportation systems. Local political and financial constraints limit them to providing their share of the capital needed to install and operate new systems. For these reasons, funds and direction for the development and demonstration of improved transit technology must come from the Congress and the Department of Transportation.

A number of U. S. cities, including Honolulu, Denver and Minneapolis/St. Paul are ready to implement systems incorporating Automated Guideway Transit technology, following extensive planning, study and community discussion. This technology is ready for urban demonstration and has been so recommended by the Office of Technology Assessment of this Congress and by the Senate Appropriations Transportation Subcommittee in its report of this past Tuesday on the DOT appropriations bill for FY'76. Such a demonstration, in our opinion, is a desirable and logical step in the further development of this technology for widespread urban deployment.

It is with a sense of urgency that we draw the attention of this committee to the need we have described for heavier emphasis on Research, Development and Demonstration. We recognize that the funding allocated for all forms of transportation must be balanced. We recommend, at the same time, that special consideration be given to these areas where the prospect of labor savings and improved service can return significant public benefits as in the case of Automated Guideway Transit, as exemplified by the AIRTRANS system at D/FW.

Thank you again for this opportunity to present our views. We hope they will be helpful in your deliberations. If there are any questions, I'll be glad to answer them.



SIERRA CLUB

324 C Street, S.E.
Washington, D.C. 20003
(202) 547-1144

August 5, 1975

The Honorable Lloyd Bentsen, Chairman
Subcommittee on Transportation
Committee on Public Works
Room 4200, Dirksen Senate Office Building
Washington, D.C. 20510

Attn: Paul Chimes

Dear Mr. Chairman:

I regret I was unable to appear in person on July 29 to present a statement in response to your letter of invitation dated June 25, 1975. Please accept the enclosed statement for the hearing record.

Sincerely,

Linda M. Billings
Washington Representative

cc: Ron Katz
240 Russell Senate Office Building



SIERRA CLUB

324 C Street, S.E.
Washington, D.C. 20003
(202) 547-1144

STATEMENT OF LINDA M. BILLINGS
BEFORE THE SUBCOMMITTEE ON TRANSPORTATION
OF THE COMMITTEE ON PUBLIC WORKS
"THE FUTURE OF THE HIGHWAY PROGRAM"

JULY 29, 1975

I am Linda M. Billings, a Washington Representative of the Sierra Club, which is a conservation organization with 150,000 members in 43 chapters. The goals of the Sierra Club are to protect and conserve the earth's natural resources and to educate people to the need to preserve and restore the quality of their environment and natural ecosystems. I appreciate the opportunity to appear before you today and comment upon the development of a national surface transportation policy and program.

Transportation modes are a dominant factor in the quality of our lives and our environment. It should be the goal of this and future legislation to develop a balanced transportation system with a flexible mix of modes for moving people and goods and providing services with a minimum of negative environmental impacts and the most efficient use of space and energy. Our current transportation programs have gone badly askew, with too much emphasis on automobiles, trucks and buses.

Much has been written about the bad side effects of air pollution, noise, congestion, destruction of the land, and consumption of scarce resources, most notably oil. Your committee now has the challenge to redress the balance and to set federal programs on a true course to a balanced transportation policy.

1. Discontinue the Highway Trust Fund

The Highway Trust Fund has outlived its usefulness, and it should be terminated. The Administration proposal would continue the Highway Trust Fund for completion and continued improvement of the Interstate System. We believe that all federal-aid highway projects, including Interstate highways, should be funded out of the general treasury, through the normal legislative process. The interstate highway system is virtually completed, and the money needed to complete it can be obtained through authorization and appropriation.

To continue the Trust Fund for interstate highways would be, in my opinion, an invitation for abuse because it would be secure money, and ^{the} ^{funded by it} projects would receive a more favorable federal matching share of 90%. Future improvements in the interstate system should be given careful scrutiny. They should fit into a national transportation policy and they should be weighed by Congress against other federal programs.

2. Flexible Funding; State and Local Planning.

State and local transportation planners should be able to use authorized and apportioned highway funds for other types of ground transportation programs. Planning and construction funds should be made directly available to urban areas. Surface transportation programs should be consistent with community desires and plans as well as national policies and goals.

State and local planning of highway projects should be done within the context of an over-all transportation plan at the federal, state and local levels.

In the Administration proposal Sec. 106(b)(2) rural transportation assistance funds can be used to finance up to 50% of the costs of "initiating and operating rural highway public passenger transportation projects."

Sec. 106(b)(1) allows rural transportation assistance funds (no percent limit specified) to be used for projects connected with public transit programs but excluding purchase of rolling stock for fixed rail systems. Sec. 106(c) allows urban transportation assistance funds to be spent on same types of projects as 106(b)(1) plus rolling stock for fixed rail systems--but not for construction or operating.

Sec. 123 of the Administration proposal appears to reduce the urban pass through of funds from 75% rather than 100%. I would urge the committee to carefully consider whether this is advisable. I also question the wisdom of allowing substitution of highway or transit projects for a withdrawn Interstate route in Section 107(e) of the Administration bill. What would be the effect of the condition that substituted highway projects would be "subject to Federal Highway Administration control?" This provision may alleviate our concerns.

In the Administration bill Sec. 119 is especially important to the local-state-federal planning roles because it strengthens the planning process of Sec. 134 of Title 23 by broadening its purposes to cover energy conservation and the more efficient use of urban transportation facilities. The full text of Sec. 119 of HR-8430 is as follows:

TRANSPORTATION PLANNING

SEC. 119. (a) The title of section 134 is amended by striking out "in certain urban areas".

(b) Section 134(a) is amended to read as follows --

"(a) It is declared to be in the national interest to encourage and promote the development of transportation systems embracing various modes of transport in a manner that will conserve the Nation's energy resources, encourage more efficient use of the Nation's highway and transit facilities, and serve the States and local communities efficiently and effectively. To accomplish these objectives the Secretary shall, pursuant to such regulations as he deems necessary, cooperate with the States, as authorized in this title, in the development of short-and long-range highway plans and programs which are properly coordinated with plans for improvements in other affected forms of transportation and which are formulated with due consideration to their probable effect on the future development of urbanized areas and the need to conserve energy and obtain a more effective utilization of existing urban transportation facilities. After July 1, 1975, the Secretary may not approve under section 105 of this title any program for projects in any urbanized area unless he finds that such projects are based on a continuing comprehensive transportation planning process carried on cooperatively by States and local communities and that the plans and programs conform with the objectives of this section. No highway project may be constructed in any urbanized area unless the responsible local officials of the urbanized area in which the project is located have been consulted and their views considered with respect to the corridor, the location, and the design of the project."

(c) Section 134 is amended by adding at the end thereof the following new subsection --

"(c) On January 15, 1979, and every four years thereafter, the Secretary shall submit to the Congress a report assessing the performance of the Nation's transportation system and evaluating alternatives for achieving future improvements in the performance of that system."

Sec. 134 recognizes that there is both a local-state and a federal role in transportation policy and planning. Its concepts need to be expanded with regard to the federal responsibility in assuring local and state consistency with national goals and policies.

3. NEPA and 4(f) are Federal Responsibilities.

Unfortunately Sec. 113 of the Administration bill takes a backward step in assuring local and state consistency with ^{established} national goals and policies which assure the protection of environmental quality and parklands.

Sec. 113 would permit the discharge of non-interstate highway program responsibilities of the Secretary under any Federal law or Executive Order, including the National Environmental Policy Act of 1969 and section 4(f) of the Department of Transportation Act by the acceptance of a certification of the particular State Governor of the performance of such responsibilities. We strongly urge that Sec. 113 be deleted.

NEPA and section 4(f) are clearly Federal responsibilities and the authority and responsibility vested in Federal agencies by these statutes can not be delegated to the states. To do so is to destroy the very purposes for which they were created and, in so doing, to destroy these important and valuable laws. NEPA and 4(f) are Federal statutes created to guide the formulation of Federal decisions. One of the basic issues NEPA seeks to address is who in the Federal government makes a decision and who does the planning and what criteria they will use. Further, 4(f) clearly instructs that the Secretary of Transportation shall make a special effort to ensure that its provisions are carried out. Past Secretaries have resisted delegation of decisions under 4(f) to even other officials within DOT and have insisted that the final decision must be made by the Secretary.

It was never intended that either NEPA or 4(f) would be implemented by the states. Well-defined procedures for implementing NEPA and 4(f) have already been established within Federal agencies, and they are building up valuable expertise. To shift these responsibilities to the states would mean an additional financial burden upon their agencies to develop the necessary procedures, personnel, and expertise.

Another basic task that NEPA addresses itself to and which the states can not perform is coordination of Federal agency actions. NEPA, if adhered to as intended, keeps the programs of Federal agencies, such as the Departments of Interior, Commerce, Transportation, and the Environmental Protection Agency in harmony with each other, rather than working in opposite directions. It seeks to ensure not only that environmental effects will be given consideration in decision making but also that federal projects such as highways will be constructed in such a manner so as not to conflict with other federal statutes for protection of air and water quality, etc. NEPA is the most effective mechanism we have at present to ensure constructive cooperation between federal programs, and a state agency can not perform this function.

Nor can localities or states always perceive the national interest with regard to a natural area which, while not a piece of Federal property, still may have values of national significance. For example, the last remnant of a large, undisturbed estuary along one of the coastlines, a unique natural area of biological, geological, or archaeological importance, and the like. Section 4(f) and NEPA can also act to protect areas which may be of high local value for natural recreation, which, even though they may be protected by local or state laws, are endangered by the singleminded power of local development interests or highway builders who have undue influence over local government and media.

Allowing states to exercise authority given to the Secretary of Transportation by NEPA and 4(f) would seriously undermine the uniform application of those laws. Although the procedures may be certified as being identical to Federal ones, the judgments will not be. There are potentially 50 different interpretations of NEPA and section 4(f) if section 113 were enacted. If past experience is any indicator those interpretations will not be in the spirit intended by the laws as enacted by Congress.

To my knowledge all 4(f) decisions so far come to DOT in cases where the state has already made the determination that 4(f) has been complied with and it is perfectly fine to build the freeway through the park. I might add that to my knowledge there are no 4(f) or NEPA lawsuits in which a highway has been delayed and the injunction later overturned by high courts. Instead, the courts have consistently found, in such cases, that the law was not being obeyed by local and state agencies.

In most cases it has been our experience that the Federal government is more responsive to environmental concerns. The state's primary concern is to get the funds to construct highway projects. In effect what section 113 would do is to put the states in the position of judging their own applications for highway construction funds. The situation they are in with respect to receiving Federal funds makes them less objective with regard to Federal laws which could impede the flow of those funds.

In discussing the objectivity of states to make the judgments required by NEPA and 4(f) another factor must be frankly discussed. Due to the massive amounts of funds which have been available both from Federal and state sources for highway construction, massive and powerful bureaucracies and concentrations of economic interests have built up in the states over the years. Even though in most states names have now been changed to "Transportation" agencies, they still essentially are in reality/highway building agencies.

The singlemindedness of these concentrations of power and their bias towards highways above all else will not be changed overnight.

We would hope that the states on their own initiative will adopt the procedures and decision planning criteria contained in NEPA and section 4(f) in developing their transportation plans. By so doing there will be less conflicts between the plans they submit and the decisions DOT must make as to whether those plans conform to the procedures and criteria which DOT is obligated to follow in the Federal statutes it must implement, and answer to. However, the states' procedures and criteria should be designed to complement, not substitute for, Federal laws such as NEPA and 4(f).

4 Finally, Federal review and preparation of the Environmental Impact Statement required by NEPA will become increasingly important in strengthening the Federal role in transportation programs. The EIS is the one document that gives full evaluation of a project and as such it serves as a valuable tool to evaluate a project within the context of national transportation programs and national policies in related areas such as environmental protection.

4. The Federal Role in Transportation Planning

Congress should establish a national transportation policy and give the Department of Transportation a strong mandate to coordinate the implementation of federal transportation programs in a manner to assure their consistency with the national transportation policy and with other important national goals and policies, such as energy conservation, urban revitalization, economic stability, and social justice.

We suggest as a ^{beginning} model for a national transportation policy similar to that the wording contained in the Interstate Commerce Commission Act:

"It is hereby declared to be the national transportation policy of the Congress to provide for fair and impartial regulation of all modes of transportation subject to the provisions of this Act [chapters 1, 8, 12, 13, and 19 of this title], so administered as to recognize and preserve the inherent advantages of each; to promote safe, adequate, economical, and efficient service and foster sound economic conditions in transportation and among the several carriers; to encourage the establishment and maintenance of reasonable charges for transportation services, without unjust discriminations, undue preferences or advantages, or unfair or destructive competitive practices; to cooperate with the several States and the duly authorized officials thereof; and to encourage fair wages and equitable working conditions; -- all to the end of developing, coordinating, and preserving a national transportation system by water, highway, and rail, as well as other means, adequate to meet the needs of the commerce of the United States, of the Postal Service, and of the national defense. All of the provisions of this Act [chapters 1, 8, 12, 13, and 19 of this Title] shall be administered and enforced with a view to carrying out the above declaration of policy."

And we urge that these additional factors be included: (1) preservation of environmental quality; (2) energy conservation; and (3) more efficient usage of resources.

We commend to your attention the comprehensive planning and programming processes contained in S. 1300, by Senators Kennedy and Weicker, which would insure proper Federal oversight over state and local transportation programs. The major elements are as follows:

Under our proposal, we revise this mechanism to provide for DOT approval over comprehensive transportation plans and a specific program of projects on an annual basis.

Two separate approval processes are contemplated. First, the Governor is responsible for the development of statewide transportation plans. He will develop rural aspects of the plan and incorporate plans formulated by urban areas into a statewide plan. Therefore, the Governor must coordinate and integrate the transportation needs of both urban and rural areas into an overall intermodel approach to the transportation problem in his or her respective State.

The State legislature has veto power over the proposed State plan, which must be submitted to the Secretary for his approval and resubmitted every 4 years, with any revisions.

The Secretary may not approve a plan unless—

First, there is adequate administration by a single State agency with responsibility for transportation in the State.

Second, various fiscal controls and maintenance of effort have been established.

Third, compliance with community development plans is demonstrated.

Fourth, compliance with environmental protection plans is demonstrated.

Fifth, compliance with energy conservation plans is demonstrated.

Sixth, urbanized areas control planning in their areas.

Seventh, further we provide for legal redress for States dissatisfied with the Secretary's action.

Planning procedures are designed to force the States to establish priorities in funding various modes of transportation. The officials, closest to the problem, must decide how best to use the limited amount of Federal funds. Their decision will be weighed in light of how their proposals comply with Federal guidelines set forth in the bill.

Once the State plan is approved, the Governor must submit for the Secretary's approval a program of projects for Federal assistance.

In approving these programs, the Secretary must assure that the State gives priority to—

First, reconstruction of highways on the rural system that are unsafe.

Second, "defense" roads.

Third, projects incorporating improved safety benefits.

Fourth, projects providing access to public airports and port facilities.

Fifth, fixed guideway and electric powered projects in areas failing to meet ambient air quality standards.

Sixth, projects which will result in the saving of energy.

Conclusion

The importance of reshaping our transportation programs and making them consistent with national policies becomes even more critical with respect to energy conservation and our dwindling petroleum supplies. It has been estimated that 52 per cent of our petroleum and 24 per cent of our energy are used for transportation. Recently the U.S. Geological Survey sharply reduced its estimates of national petroleum reserves by 80 per cent; out of the original estimate of 10 to 20 billion barrels of oil estimated to be in the Atlantic OCS, there is now thought to be only two to four billion barrels; the estimates of oil from all U.S. OCS areas is down from an estimated 65 to 130 billion to a current estimate of only 10 to 49 billion barrels of oil; and the total onshore reserve of oil has been reduced from 135 to 270 billion down to a current estimate of 37 to 81 billion barrels. Clearly we must shift our transportation emphasis away from vehicles which inefficiently use petroleum products. We need to have greater emphasis on fixed rail transportation modes for moving people and goods within and between our cities and less dependence on automobiles, buses, and trucks for surface transportation.

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EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL ON ENVIRONMENTAL QUALITY

722 JACKSON PLACE, N. W.

WASHINGTON, D. C. 20006

September 4, 1975

Dear Senator Bentsen:

Thank you for your letter of July 23, 1975, inviting me to participate in the hearings on the Federal-Aid Highway Program before the Senate Committee on Public Works, Subcommittee on Transportation. As members of our respective staffs had discussed, a conflict in my schedule for the hearing date made it impossible for me to appear. However, I want to take this opportunity to present a brief discussion of several of the issues which were raised in the hearings.

The specific subject scheduled for discussion on July 29, 1975 was "Federal Procedural Requirements Affecting Highway Projects." As your letter noted, a number of federal statutory provisions affect the highway program, as well as most other public works programs. Among these provisions which have environmental implications are requirements concerning air, water, and noise pollution, taking of parklands, and metropolitan transportation planning, as well as the procedural and substantive requirements of the National Environmental Policy Act (NEPA).

The Council believes that the need for these provisions has been firmly established. Each is intended to assure that the highway's impact on the community is minimized. The issue, as your letter notes, is how to carry out these provisions in a manner which does not cause needless delay, while still fulfilling the intent of the law.

The Council is charged with overseeing the implementation of NEPA by federal agencies and with the issuance of guidance for agency preparation of environmental impact statements (EIS's). Our experience over the years is that problems of program or project delay can be virtually eliminated if environmental reviews begin early in the planning process. Early timing enables the review to take place concurrently with other project planning. The key requirements for early environmental review are adequate and trained staff, close consultation between local, state and federal officials, and regular communication with the public.

The kinds of delay which occurred in the first few years after NEPA's enactment have largely been eliminated. At first, federal agencies had considerable difficulty working NEPA into their normal planning and decision-making process. Some, notably the Federal Highway Administration (FHWA), were required to prepare a large number of EIS's on projects planned before 1970. Now, however, nearly all agencies have overcome most of these backlog problems. For example, from a high of 1,123 EIS's in 1971, FHWA now expects to file only 250 EIS's this year.

Red-tape delays have long been a source of irritation with the highway program, and further efforts will need to be made to increase its efficiency. For example, a recent attempt to reduce administrative delays was made in the Federal-Aid Highway Act of 1973, with the provision for federal acceptance of state certification of compliance with specific statutory requirements. NEPA certification has recently been included in the Administration's proposed highway bill. The Council endorses this procedure for defined classes of projects, if project approval authority is clearly delegated to the states along with the authority to carry out NEPA, and if NEPA, rather than state environmental laws, is the law with which a state would certify compliance.

One important question concerns the effects of NEPA-related litigation on proposed federal actions. Recently the Council asked all federal agencies for information on past NEPA cases and for a regular report on current litigation (a copy of the request to DOT is enclosed). This information will make it possible for us to determine the extent to which NEPA litigation is a serious cause of delay. Such litigation has occasionally delayed highly controversial or environmentally questionable projects. But based on our review to date, we conclude that the impact of such delays on overall federal programs is not significant.

Another point I would like to make is that some projects which have been the subject of thorough environmental reviews are delayed not because of litigation, but rather because of serious environmental problems with the projects themselves, frequently demonstrated by strong federal agency objections. In many cases, proposals have been modified or alternatives taken to mitigate adverse environmental impacts. In other cases, such as Interstate 66 in northern Virginia, projects have

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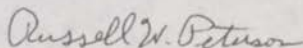
ultimately been disapproved on grounds related in part to environmental issues. It is reasonable to expect that some delay, redesign, and project cancellations on environmental grounds will continue to occur in public works programs of this size; if they did not, I would question the value of the NEPA review process.

In sum, then, the Council is not aware of serious unwarranted delays due to environmental reviews in the planning process of highway projects. In the course of the past year we have conducted a detailed review of federal implementation of NEPA, including the requirements for preparation of environmental impact statements. A report on this review will be issued in the near future and we will be sure to send copies to the Committee. Meanwhile, we would be pleased to look into any claims of delay which have come to the Committee's attention, with respect to either specific projects or general problems with the environmental review process. Our investigation of such claims often turns up factors unrelated to environmental impact statements -- or indeed to the environment at all -- for which NEPA provides a convenient target for allegations of delay.

Thank you for the opportunity to present my views on this matter. I would be happy to respond to any questions.

The Office of Management and Budget has advised us that they have no objections to the submission of this testimony from the standpoint of the Administration's program.

Sincerely,



Russell W. Peterson
Chairman

Honorable Lloyd Bentsen
United States Senate
Washington, D. C. 20510

Enclosure

Senator BURDICK. With that, we will recess until tomorrow at 10 o'clock.

[Whereupon, at 12 o'clock noon, the subcommittee recessed, to reconvene at 10 a.m., Wednesday, July 30, 1975.]

FUTURE OF THE HIGHWAY PROGRAM

NATIONAL TRANSPORTATION POLICY

WEDNESDAY, JULY 30, 1975

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION,
Washington, D.C.

The subcommittee met at 9:40 a.m., pursuant to recess, in room 4200, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee), presiding.

Present: Senators Bentsen, Randolph, and Domenici.

Senator BENTSEN. These hearings will come to order.

For the past several days this subcommittee has been receiving testimony from a series of distinguished witnesses on the future of the highway program.

These hearings have been focused on individual problems relating to transportation such as urban transportation, rural transportation, and the Federal role in the highway program. Today we attempt to fit some of these pieces together by discussing the broad topic of the national transportation policy.

I said at the outset of these hearings that I wanted them to be more than just a review of highways, but a consideration of the role of highways in an integrated transportation system.

Our three distinguished witnesses today are well suited to discuss the procedure picture. The first, Alan Boyd, the first U.S. Secretary of Transportation under President Johnson. He is known as a philosopher, as well as an able Administrator.

He has been speaking out for some years on a national transportation policy.

Our second witness, Mr. Francis Turner, is a former highway administrator and an acknowledged expert on highway matters. Mr. Turner is now retired and working as a consultant, working at times with the House Public Works Committee.

Our final witness, Dr. Barry Commoner, is the director of the Center for Biology at the Washington University in St. Louis.

He is a noted lecturer and a father of the environmental movement that swept this country.

We will ask all three witnesses to give their statements and then we will question you as a panel. I would encourage the limiting of the oral statements to 15 minutes. We will take the written statements for the record. I would wish that each of you would feel free to question the other.

Would you proceed Mr. Boyd? I still want to call you Mr. Secretary.

STATEMENT OF ALAN BOYD, PRESIDENT, ILLINOIS CENTRAL
RAILROAD

Mr. Boyd. Thank you. I think the record should show among the other outstanding characteristics of Mr. Turner is the fact that he was born and raised in the great State of Texas.

Mr. Chairman, I very much appreciate the invitation to appear before the committee to discuss national transportation policy, the place of highways in an integrated transportation system.

I have devoted most of my adult life to transportation, primarily in Government but have also been employed for a substantial period in the management of a major railroad system.

My Government experience comprehends regulation at both the State and Federal level, as well as the performance of transportation duties in the executive branch of the Federal Government. That experience involved various activities relating to aviation, the maritime industry, motor vehicles, highway planning and development, mass transit and railroads.

There are enough published data on transportation in the United States to literally fill this hearing room. They report upon and analyze transportation and its relationship to the gross national product; transportation as a lifeline of commerce; transportation as a provider of services and employment; transportation as an impact upon the environment; transportation as a source of social good or evil in such areas as land use and pollution, and so on. I will not burden you with more figures.

Rather, it shall be my purpose today to attempt an assessment why this Congress should pursue as a matter of major, immediate public concern the issues of whether there is a need for a national transportation policy and how major elements of transportation should fit within a national transportation policy.

These issues are all bottomed on the fact that by its action or inaction, the Congress has the power to affect dramatically the future of transportation in this country. That, in turn, has other major implications to the total population.

A basic premise is that transportation is a service function. Its value lies in moving goods from where they are to where they are wanted; from moving people from where they are to where they want to go.

Another basic premise is that our resources, natural, human, and financial, are limited. More and more, it will become apparent that options must be considered and choices made in terms of public policy. We can no longer afford to do everything that seems to be a worthwhile objective.

One of the basic objectives of our transportation programs and policies has been the enhancement of personal mobility. This is exemplified by the magnificent highway system, financed to a large degree through revenues provided by the Federal Government.

The combined primary, secondary, and Interstate systems, along with the national forest and national park system roads constitute what must be the greatest transportation network ever devised by man. It has made it possible for an individual to live in one community, work in another, maintain contact with family and friends

in another, and enjoy recreational pursuits in still other communities—a possibility undreamed of for the vast majority at the beginning of this century.

It has also contributed substantially to what is known as urban sprawl, now considered at best a mixed blessing. It has led to a dismal record of more than a thousand deaths per week, year after year, with injuries counted in the tens of thousands for the same period.

The system has oriented urban society to the private automobile. It has caused the decline of public transportation. It has provided for the establishment of suburban shopping centers, warehouses, and manufacturing plants. These mean jobs.

Unfortunately, the young, the old, the poor, the handicapped who cannot drive, or cannot afford to drive, do not benefit from these opportunities or jobs. The decline of public transportation has made them captive to their own surroundings.

Furthermore, the urban segments of the Interstate System have taken substantial land off local tax rolls. They have forced neighborhood character changes. Costs such as these plus pollution, reduction of housing supply, and required relocations of community and commercial services have not been borne by user charges.

These are truly public costs. The highway system along with a history of cheap energy in the form of gasoline has permitted an incredible consumption of a wasting asset. The motor vehicle is a significant cause of the urgent requirement to consider tradeoffs and alternatives in the production and consumption of energy.

Intercity segments of the Interstate System should be completed. Urban segments should become strictly a matter of local option. The option should include authority to spend the funds authorized for the urban segments on any type of transportation the community desires, from bicycle paths to rail transit.

The local community for setting the option is a community of interest. It is not defined by current political boundaries. The latter seldom relate to communities of economic, social, and cultural interest.

A future highway program ought to be a part of a national transportation program. The elements of a National Highway System are largely completed. Future Federal efforts should be essentially limited to reconstruction and improving throughput on the major segments with a greater emphasis toward improving safety on the rural elements.

Questions are sometimes asked as to whether there is a national transportation policy; whether there is a need for a national transportation policy and whether it is possible to develop a transportation policy.

My answer is: Yes, there is a transportation policy which is made up of a conglomerate of unrelated transportation programs and as a policy can most charitably be described as incoherent.

A rational transportation policy is an imperative for this country. It is possible, though difficult, to develop a national transportation policy. I have sketched this panorama of highways to indicate reasons why we cannot continue to rely on highway construction to solve our major transportation needs.

The criteria to be utilized in developing a policy can be rather simply stated. The major elements include economic efficiency, energy efficiency, safety, land use, environmental impact, national defense requirements, plus the values of competition or regulation, personal mobility, and of time.

There may well be other criteria that should be included but these strike me as basic. A relative value can be placed upon these criteria by the Congress in answering the question: What is desired of our transportation system for the national good?

No longer can we say we want everything because we know we cannot afford everything. That being the case, it should be possible to give a weight to each of these criteria and define a national transportation policy in those terms.

Different modes of transportation have certain capabilities which are susceptible of quantification and description. Depending upon the policy objectives, the promotion or discouragement by mode can be dealt with through specific legislative action. As circumstances change, the criteria can be revalued.

It may well be that different weightings are required for urban versus rural transportation. It is likely that separate consideration will be required for Government owned versus private ownership of transportation entities.

Also, is there a logical or legal basis for requiring cross subsidization; or put another way, what is the rationale for requiring privately owned transportation entities to provide social benefits for the public at the expense of the transportation entity? The whole issue of governmental subsidy to various transport modes needs to be evaluated in terms of the objectives stated above.

Parenthetically, I should state that I despair at the thought of Congress trying to develop, with or without the aid of the administration, a cohesive, coherent transportation policy, given the current organizational structure with different committees having the responsibility to provide substantive legislative authorizations.

With rare exceptions, it is impossible to legislate for one mode of transportation without impacting, directly, the function or operation of another or other modes. Current congressional committee structure does not seem to comprehend this fact.

Not only do I feel that all transportation authorizations should come within the purview of a single committee in each House of the Congress, but I would urge the Congress to consider the consolidation of transportation activities within the executive branch.

Specifically, I believe the Maritime Administration should become an integral part of the Department of Transportation. I also believe the logic of transportation system development requires DOT to be provided with substantial authority over the inland navigation improvement projects now within the exclusive jurisdiction of the Army Corps of Engineers.

These navigation projects deal almost, if not totally, exclusively with commercial transportation activities. If we are to develop a national transportation policy, as I believe we must, then it should be on the basis of a transportation system and not on the basis of a series of unrelated programs and projects which have created the imbalances we see today.

It is no great feat to develop a concept for a transportation policy. It will be more difficult to assign relative values. In a democratic society, the most difficult maneuver is that of moving from abstract values to specific programs. To get to specific programs at the national level, it seems to me there must be planning done by the Executive for programs which can qualify against the criteria and values established in the national transportation policy.

As a matter of basic philosophy, I am opposed to the concept of trust funds such as the highway trust fund, and the airport and airways trust fund. Particularly in the case of the highway trust fund, a vast majority of American families are contributing excise taxes to a program which has a life of its own, beyond control, regardless of current economic circumstances. The ownership of motor vehicles is so widespread, the taxes supporting the trust fund are virtually a general tax on the population.

Even so, as a result of the direct impact of public highway policy on mass transit and the railroad industry, a possible remedy to this imbalance lies in the creation of a transportation trust fund which would be efficiently used for a specific system.

Under this concept, all elements of surface transportation would pay user charges on an equivalent basis. Appropriations would be based on need to meet the criteria stated in the policy. The inequity of present policy as to waterways could also be resolved by such a mechanism.

If the shipper of goods is to have a reasonable choice of services, the Federal Government must support each mode on an even-handed basis. Today, railroads own, maintain and pay taxes upon their rights-of-way.

Heavy trucks, which compete for rail traffic, do not own or maintain their rights-of-way and pay user charges substantially less than the benefits they receive from the use of the right-of-way. At the same time, barges which are also competitive with railroads, have rights-of-way provided completely by Government funding, maintained by Government funding and pay no charges whatsoever for the use of that right-of-way which is freely available.

The American taxpayers, over the years, have spent enormous sums for waterways' improvements to create an inland navigation system that now exceeds 25,000 miles. Very substantial public benefits have been claimed for the expenditure of these public funds and there is no question that any expenditure of billions of dollars in such an activity is bound to create benefits through additional employment, and an increase in certain land values.

These benefits, however, are limited in scope and to my knowledge no objective analysis, to date, has been published showing that the public benefits equated the public costs. In addition, the waterway improvement program has not considered the cost to the public in deteriorating rail service, which can be attributed to the subsidized barge competitive transportation.

The current policies of this Government toward motor vehicles and barges is dedicated to putting the railroads out of business. I do not believe that is the objective of the policies nor that these policies have resulted from a conscious judgment of the impact they would have on rail transportation.

Nonetheless, that is the case and it represents an immediate issue with which this Congress is faced. Without attempting to be melodramatic, I tell you gentlemen that transportation funding policies must be changed to create an equitable balance in the support given these modes or the railroad industry will either dwindle down to nothing or be nationalized.

In developing any future policy whether for highways or any transportation mode, I urge Congress to consider a mechanism for capturing the value of enhancement to real property that comes about solely through the operation of Federal funding for transportation. Such increment of value may be used for future funding of the transportation system.

I also urge major emphasis on research and development activities to further the accomplishment of goals established for the public benefit in a total transportation policy.

The burden of my testimony is that a highway policy standing alone has many public benefits but enormous public detriments. Our highway system is virtually complete. It is time to develop a policy which seeks to further our total transportation system in the public interest, applying support in an evenhanded fashion to accomplish the goals of that policy.

I want to express my thanks for the opportunity to testify before the committee and will be happy to try to answer your questions.

Senator BENTSEN. I must say you provoke some questions. But we are going to have some votes later on. I want each of you gentlemen, who traveled to be here, at least some of you have, to have an opportunity to testify.

Mr. Turner, go ahead. Then we will get back to these questions.

STATEMENT OF F. C. TURNER, FEDERAL HIGHWAY ADMINISTRATOR, RETIRED

Mr. TURNER. Mr. Chairman, I am pleased to be here again. I feel almost at home at this table. I have spent many hours here. I am also pleased to sit here alongside of a former boss, with whose statement just made, I will substantially disagree.

Senator BENTSEN. You have the full privilege of disagreeing now without having any retributions.

Mr. BOYD. That represents no change either.

Mr. TURNER. Nonetheless, I thought he was a very fine boss and he was my selection for boss and I am glad the President took my recommendation and appointed him as his Secretary of Transportation.

Transportation should be designed to serve its customers and shaped to meet their needs: rather than being used as a tool to force the users into conformity with some supposedly most efficient plan or pattern of lifestyle.

To make transportation policy, it is first necessary to know how people and goods are being transported, or could be transported, whether this fits their needs and desired patterns of lifestyle, what changes they wish to be made, and how any such changes can be most efficiently and effectively brought about.

The highway mode is clearly our dominant form of transportation at present and there is no indication from the big majority of our people that they desire to make any radical change in it. But despite their indicated preferences, it is clear to transportation people that the present petroleum energy crisis will force some early and drastic changes. About 90 percent of all person-miles of travel are presently performed by highway.

Senator BENTSEN. Let me ask you, Mr. Turner, are you reading from a summary of the prepared statement?

Mr. TURNER. I am reading from notes I made for an oral presentation. I will give these to the reporter if you desire.

Senator BENTSEN. That is fine.

Mr. TURNER. About 90 percent of all personal miles of travel are presently performed on the highway. This is many times that of all other modes combined.

About three-fourths of the dollar amounts paid for transportation of freight and goods is paid to the highway mode. Within our cities, the percentage of highway use is even greater; 98 percent of all urban trips are presently made on highway and street systems.

Virtually 100 percent of all movement of goods is done on the highway system, together with the transportation needed to supply the limitless varieties of public and private service functions on which our daily lives depend.

Highway transportation represents about one-sixth of the gross national product. About 85 percent of the grand total of all transportation costs of people and goods is by the highway mode.

Thus, highway transportation policy is almost synonymous with national transportation policy and will be for the foreseeable future. It is the one mode of transportation which serves not only its own users, but those users of all the other modes by collecting persons and goods from their points of origin and bringing them to the other modes and then distributing them at the end of their trips to their ultimate destinations. It is the only mode in which its entire cost of construction, operation, and maintenance is paid by the users without subsidies.

You can recognize right off that that is a contrary position to that just expressed by Mr. Boyd.

The needs of the principal highway systems to 1990, as recently reported to Congress, exceed \$400 billion, with 90 percent of those needs on other than Interstate systems; systems which carry about 80 percent of all the traffic and people and goods in our country.

More than half of these needs are in our cities, largely for improvement of arterial streets.

The movement of people in our daily urban commuting trips to the central business districts accounts for only about 5 percent of our trips by all modes of transportation. But it amounts to only about 2 percent during the morning and afternoon so-called peak hours.

Even in New York City, which has the highest percentage of all transit riders in the Nation, on the rail system—the rail system that comprises about 90 percent of all the rail traffic used for transit in the country—about 85 percent of all the daily trips within the New York region are still made on the street and highway system.

In the other cities throughout the country this percentage is actually more nearly 95 percent. So the focus of our attention in urban areas should obviously be on this larger 85 to 90 percent of the travel which is performed on the streets and highways systems rather than on rail transit.

Yet, during the last several years, most of our attention and nearly all of the discussion about transportation policy, including that of today, has been devoted to intensive efforts to promote rail transit in lieu of highway movement in our cities—and to do this by transferring funding in the highway trust fund, paid into that fund by highway users—transferring those funds over to promotion of rail transit. Further, to encourage the use of rail transit, many artificial restrictions have been imposed on the use of automobiles and automotive equipment in our urban areas, all designed to promote transit. It should be noted that about 75 percent, however, of all of these transit patrons in our cities are already carried by buses which have to operate on the street and highway systems of our cities—highway systems that are provided and maintained through the user tax payments I have just referred to.

It has been contended that the highway programs have been the cause of the decline of transit ridership over the years, but the historical record of transit shows that these losses began in the early and mid-1920's, long before the enactment of the enlarged highway improvement program with its highway trust fund in 1956.

In that 30-year period of time, the subway and the elevated rail transit systems in New York City, and elsewhere, have continued relatively stable in ridership volume, but buses have almost entirely replaced the surface rail lines.

During this period, the total of urban public transit riders has declined 40 percent. All of this loss of riders occurred before the beginning of the present highway program, which highway program has been blamed by critics as the cause of the transit industry's woes.

But it was not the highway program itself which caused this loss of riders, rather it was the fact that the fixed location rail or bus routes did not provide and cannot provide the type of transportation which most people need to meet their daily trip requirements.

Such fixed locations system simply cannot do this and they cannot do it without regard to whatever amounts of money might be poured into their creation and operation. That is why the general public demands an improved transportation system which can more nearly conform to their expressed desires and patterns of life-style and the kind of living environment they obviously prefer.

It seems clear that through their continued use of the highway mode, and a continuing loss of riders by all kinds of transit, that people still prefer the highway mode, even though it has some rather obvious and serious drawbacks and shortcomings, like Mr. Boyd has indicated.

It is within this kind of evidence that our national transportation policy must be developed to compare the merits and deficiencies of the various modes in order to make the most effective use of our always scarce transportation funds.

We simply cannot afford the luxury, or what is actually a waste, of our funds by building duplicative facilities simply to provide the theoretical choice that has often been indicated.

Our policy must be mindful of the restrictions imposed by costs of constructing, maintaining and operating the system, both public and private, the quantities of energy which the overall system will require, the quantities of air pollution generated, and the amount of relief given to the present traffic levels which trouble our cities today.

Since the use which is made of our highway and street systems is evidence of the high value which individuals place on personal mobility, it must be accepted that the majority of our people include this personal mobility as one of their cardinal goals—a goal that is at least equal to an improved environment, public health, and others. The family automobile, despite its sins, is their choice of mode for making most of their trips.

Frequently, it is stated that we must force the daily commuter out of his automobile and onto the public transit because it is cheaper, because it saves gasoline and other petroleum fuels, and that it is the only way to reduce air pollution to the statutorily required levels.

Recent research, done by and for the Department of Transportation, and others, finds that none of these goals can be achieved through the actions that would transfer our daily commuter trips to conventional forms of bus and rail transit, particularly if that transfer is made to the rail mode.

The principal reason is that the rail mode cannot serve these trip needs of and by itself. It must be supplemented by a feeder and distributor system operating on the street system which almost invariably is the family automobile, or the bus, which collects the people in their residential areas, carries them to a rail station, transfers them then to the rail system for the line haul.

If we are comparing line haul only, then theoretically, the rail system might be more economical. But that is not the total system which we must consider. We have to include the collection and distribution portions at the same time.

The Department's own internal research finds that less than a 2 percent energy savings might be accomplished at the end of about 15 years and the expenditure of many billions of dollars, by transfer of auto riders to rail trains.

Other solutions, particularly car pools, can make several times as large a savings within 2 to 4 years, and at almost no expenditure of either public or private funds. Other Department-sponsored research shows that rail transit is more than twice as costly per trip as is the same trip made on an all-bus system.

Likewise, the bus system consumes substantially lesser amounts of energy and also produces substantially lesser quantities of each of the three controlled air pollutants exhausted from automotive vehicles.

There is general consistency in the findings of many researchers, demonstrated through numerous actual applications, that more efficient utilization of our existing buses and automobiles operating on an improved street and highway network will produce the most fuel efficient, the least air polluting, and the least costly private and mass transit system of any systems that have yet been devised or proposed.

It is toward these kinds of solutions that I suggest that our policies should be directed.

I refer to the enactment of measures which would cause the large scale use of bus pools, carpools, taxicab pools, reinstitution of the old-time jitney, and similar ride sharing arrangements in order to sub-

stantially reduce the numbers of vehicles competing for street space in our cities, and do this together with other traffic and administrative controls, which would make much larger use of exclusive busways, exclusive bus streets, staggered working hours, flexible working hours, improved traffic signal synchronization and many, many similar measures.

The most effective mass transit system has been found to be the so-called van-pool, in which 8 to 10 riders are formed into a ride pool which has reasonably common working localities and hours, whose riders live either close to each other or along the most direct route of travel for the group, using computerized programs in order to match up such riders.

This is already a proven process with highly satisfying results both to the riders and the efforts to improve the transportation system. In this system, the cost to the riders is only about one-tenth of the cost of a rail transit trip.

Senator BENTSEN. Mr. Turner, would you bring your testimony to a close? We will take it in its entirety for the record, if you would.

[The balance of Mr. Turner's oral testimony and his complete written statement follows:]

The fuel efficiency of the van pool is far greater than that of the carpool, the bus, or the rail systems. But even the conventional carpool carrying four persons has about the same fuel efficiency as the conventional bus transit system, and with five persons is better than either bus or rail systems. It would be my recommendation that the van pool should be operated by our normal transit companies on those route segments that carry low volumes instead of using the normal 50-seat bus and driver to haul 4 or 5 passengers. The van pool could also be used for those areas of the community where the density of work trips is too low to support normal transit routes, and in the absence of public transportation, commuters take their own autos and thus create the congestion which we all deplore. There seems to me to be no reason except the inertia of management that would prevent the transit company from offering the van type of vehicle for rental to a rider pool, in exactly the same way that the 3M Co. is doing in St. Paul, and as others are doing elsewhere.

Many of the indicated \$400 billion-plus highway systems needs to the year 1990 are for the arterial streets in urban areas over which such bus and ride pool vehicles would operate, and these improvements would do much to further increase the fuel efficiency, decrease the traveltime, and reduce congestion, and air pollution. Our policy should favor the above kinds of efficiency actions rather than the building of massive and costly rail transit lines which will take many years to become operative. And by the time that they could be made available, the annual growth of traffic volumes will substantially exceed the small percentage of relief that they could bring.

We need all of the funding that the present highway user taxes going into the highway trust fund will generate for the rest of this century and the life of the fund should be indefinitely extended for the purposes now authorized. The fund is not large enough to share with other new uses such as major rail public transit undertakings, particularly for their bottomless pit of operating costs, and deficits. Opening the fund to such uses would make it inadequate for either user.

For those few rail transit projects already in operation, which obviously cannot presently be abandoned, a special financing mechanism for them only, and tailored specifically to their situation, should be created with its own separate financing, if Federal assistance is to be provided at all; following the same principles which have been so successfully used with the State and Federal highway trust fund.

We shall need a system of highways no less extensive and having no less capacity than now projected for the rest of this century, whether we run out of petroleum fuels in 10 years, 20 years, or 50 years; and the future generations of the 21st century will also need transportation corridors probably like our highway network of today, whether those corridors are called streets and highways, or by some other name; and whether we by then, have made some other kind

of vehicle not called an automobile. For mankind will need to move himself and his commerce from place to place in future generations, just as has been done since the beginning of history, and even before the invention of the automobile, or even the wheel itself.

There are a number of other points made in my longer prepared statement as submitted for the record which enlarge on the specific points which the chairman's letter of invitation inquired about. Likewise there are attached to that statement three charts and tables which give details and other specifics about the principal points which I have just stated to the committee.

THE FUTURE OF THE HIGHWAY PROGRAM

STATEMENT PREPARED FOR THE RECORD OF SENATE PUBLIC WORKS COMMITTEE

July 30, 1975

by F. C. Turner, Federal Highway Administrator, Retired

The Committee has indicated that the question being considered in today's Hearing Session is entitled, "National Transportation Policy: The Place of Highways in an Integrated Transportation System," and that you wish to consider the highway program, not as an isolated federal program, but as a link in our total transportation system. This will require, therefore, that we compare the merits and characteristics of various systems with each other. Certainly, those of us who have been closely associated with the Federal-aid highway program have long held this view of highways and tried to develop both policy and programs around this concept.

The foundation for development of any national policy must be firmly rooted in facts, without the emotional and partisan rhetoric which has for a number of years been the principal substance of discussions about highways and their place in the total transportation picture. The policy of the Executive Branch of the federal government has been one which disregarded many of these facts in attempts to promote urban mass-transit through the device of condemning highways and automobiles and trucks, in order to justify the diversion of dedicated highway user charges paid into the Highway Trust Fund to rail mass-transit projects in numerous urban areas.

It is clear that there are some serious problems and shortcomings in the movement of persons and goods by the highway mode, and nobody is more aware of these than the individuals in the highway field; and nobody is doing more to find practical and workable remedies for these problems than the highwaymen themselves. But any prescriptions for curative action must be based on the hard facts of reality. We must begin with the fact that personal mobility for the overwhelming majority of Americans can only be furnished by the auto and highway system under any of our presently available technologies. Most suggestions for cures provide that the "other fellow" make any necessary sacrifices, thus leaving the roadway to the person proposing the solution, but until all of us accept the responsibility to share in the needed changes in travel habits, there can be no measurable advances toward solution, regardless of what may be the scheme proposed.

In seeking for solutions, we must recognize that the personal mobility which an auto and the highway and street system provide are both wanted and needed by us as individuals and collectively as a city and nation. Furthermore, such a mobility is just as important to us in our list of goals and objectives as clean air and water, health care, a better environment, equal rights, and a long list of other items. Where some of these goals collide with each other, as surely they do, then we must make the necessary adjustments and trade-offs to accomodate both of them.

Only in this spirit can our transportation policy be developed. We must take actions which will continue to provide the personal mobility which our people need and want; but in doing so we must achieve a substantial reduction in the present rate of consumption of fossil fuels, reductions in air-polluting exhaust emissions, decreased street congestion, and minimum demands for private and public funding, both for initial capital and subsequent operating costs.

Some of the real life facts governing our development of transportation policy are listed below. Because we have tended to focus on the issue of urban commuter movements to the exclusion of the other more important issues, it seems necessary to first consider and properly dispose of this issue before most people will be willing to turn their attention to the needs of the other elements of our highway system; needs which are many times as great in both money and general impact as are those of the urban commuter movement, large and important as is that problem. Some of these facts are:

1. Urban streets and highways presently move 99 percent of our daily persons-trips, using private cars, taxicabs, school buses, and public transit buses.
2. Rail type public transit costs roughly twice as much for the average commuter trip as does the same trip by bus mass-transit.
3. Few public transit systems are presently paying even their day to day out-of-pocket operating costs, and none are completely paying for depreciation of equipment, debt service, and retirement of capital costs.
4. Any kind of "mass-transit" must provide travel characteristics closely approaching those of the private automobile if it is to be successful in attracting any large numbers of new riders.

5. The regular public transit bus is considerably more fuel efficient than rail systems because it can serve both as the collector and distributor system for its passengers, unlike the rail systems which must use extensive private autos, taxicabs, and buses to collect and distribute their riders between residences, offices, and rail stations. The large efficiencies frequently claimed for rail systems fail to include the amounts of fuel and miles of vehicle travel required to collect and distribute their riders.

6. The standard automobile of today when carrying five persons, the so-called compact car carrying four persons, and the Vanpool when carrying eight persons are more fuel-efficient, and far cheaper, than any of the conventional rail or bus transit systems.

7. The Vanpool with about nine persons is the most fuel efficient of any kind of "mass transportation," and can be made even more efficient through use of smaller engines than those now normally supplied with this type of vehicle.

8. With modern computerized programs for matching riders having common trip route and schedule requirements, we can create efficient Vanpools and carpools, requiring no large outlays of public funding, while attaining a larger reduction in fuel consumption than can be achieved with any of the rail-transit systems now being considered, and providing transportation which more closely approximates the private automobile.

9. We cannot expect to get all of our urban commuters into either these fuel-efficient Vanpools, carpools, or into any of the conventional forms of rail or bus mass-transit; but we can expect to get as many into these alternative forms as into the conventional forms.

10. We cannot move any of the freight, or public and private kinds of service vehicles, on mass-transit of any kind.

11. Therefore, it is necessary to provide a substantial street and highway capacity in addition to any form of mass-transit capacity.

12. The street and highway system can provide in one facility the service needed for private auto movements, public mass-transit, movement of freight and goods, and all types of service functions, thus reducing the transportation costs for each of them.

Within the above framework, we can develop a policy and program for the future which will correct the unsatisfactory fuel consumption characteristics of the present highway-based transportation systems, provide ourselves with cheap and efficient mass-transportation, reduce the number of vehicles competing for space on our streets and highways, keep public budgetary requirements low, and coupled with the legislative work already done by this Committee on the air pollution characteristics of automotive vehicles, bring highway related air pollution within acceptable limits.

To do these things, however, will require some substantial revisions in the way we presently use our vehicles and the street and highway networks in our urban areas particularly. We must take what measures are required to get rid of most of the commuter vehicles which carry only the driver, and put these and some of the other vehicle occupants into fewer vehicles through full utilization of Vanpools and carpools. The latent possibilities in these forms of mass transportation have been proven by numerous recent demonstration projects. It is now time to convert these successful demonstrations into active national policy.

I suggest that the way to accomplish this is through the device of requiring that the terminal (or parking facilities) portions of the transportation system be considered as an integral part of the total highway transportation system and the number of parking spaces that are provided in the center city and at other major trip origin or destination points be limited to that number calculated to be needed, based on reasonable vehicle pooling requirements as determined for each area, plus some reasonable additional number for contingencies, visitors, and other purposes; and the parking places so provided then assigned to the pool vehicles on a demonstrated needs basis.

The present policy and practice regarding the quantity of public transit to be provided should be reversed, wherein private transportation is thought of as being a supplement to (more properly a competitor) public mass-transit. Public mass-transit in the form of buses should be provided in a quantity which is based on the NON-peak hour volumes, rather than the peak hour as is now done. Instead of trying to base the number of public transit vehicles on the 20-hour per week peak volumes and having vehicles run almost empty during the other 120 hours of the week, or even parked, while still having to pay the drivers, the private Vanpool and carpool system should be used to augment the base weektransit capacity during the fewer peak hours. Also, since a large share of the buses needed during the peak period can make only one trip anyway during each of the morning and evening peak periods, such buses could be leased to individuals or groups on a subscription basis, without a driver, and thus used as a larger-sized Vanpool or carpool. Many such bus arrangements on a private basis are already in satisfactory operation in various parts of the country, some here in the Washington area.

With some new and innovative management thinking about making better use of the highway and street system to move larger numbers of persons in fewer vehicles, the Vanpool and buspool vehicles could be provided on a lease basis to individuals or groups; in the same way that the Bell Company in St. Paul, Minnesota, has done for the last 2 1/2 years with spectacular success, with large benefits to both the company and its employees.

CAN WE SET A NATIONAL TRANSPORTATION POLICY?

Yes, in the highway field we already have a rather complete statement of policy and national legislation to implement it, very largely developed by this Committee. But the questions of national transportation policy, like those in most other fields, must come eventually to a consideration of cost; what benefits are derived; and how these factors in the transportation field compare to the same factors in other fields of need; in other words, policy necessarily has to become a part of the budget priority debate. Therefore, it is necessary that transportation policy studies include the questions of what are the costs, and the benefits in terms of those costs, of each of the subparts which make up the total national transportation policy and the physical plant. The Committee asked whether it is possible and desirable to formulate national transportation policy. My own feeling is that it is both possible and mandatory, and that in a very large degree, this has already been done, but perhaps more so in the highways and urban transportation field than in others. The 1974 National Transportation Report recently submitted to the Congress provides in one document much of the materials which are needed for a basic understanding of the whole transportation network of the country. It includes the inputs from State Governors, together with information concerning the

quantities of transportation services by modes, their costs of operation, capital needs, social and environmental impacts, energy consumption rates, and much other information. It can be most helpful in the development of a national transportation policy, and the setting of priorities of transportation investment.

THE PLANNING PROCESS

The Committee also asks about whether planning processes in transportation should be strengthened, made regional-wide, and related to environmental and land-use considerations. A great deal of the discussion about transportation during the past few years has related to the planning processes used in connection with the highway program. Since the Federal-Aid Highway Act of 1934 began the planning process as a statutory part of the highway program, it has undergone much improvement, enlargement, and change. Quite obviously, the processes of 40 years ago were not as sophisticated nor as all inclusive as are the processes used today, nor were our areas of emphasis and concern the same as today, but the planning approach has been an integral and significant part of the program during all of this period of time. And when the HHIHA, a predecessor agency to our present HUD, was instituted with its so-called Section 701 planning money and authority, the highway program and HHIHA authorities were immediately joined in cooperative arrangements under which virtually every one of the many urban planning studies that were made in this country during the 50's and later years were undertaken.

Thus the highway program's personnel are thoroughly versed in, and strong supporters of the planning process. In general, I feel that it is a highly sophisticated, comprehensive, well conceived and executed operation, needing little in the way of new or additional legislative authorization. A critical weaknesses of the process, however, lies outside the planning operation itself; in the methodology by which results from the planning studies are used in the "policital" process to convert planning process results into annual work programs of specific projects. Too often, the findings of a planning process and the analytical evaluations of various elements of the transportation plan, are disregarded by the local government officials who, by present statutes, are given the principal authority to propose such annual work programs, but who generally have no responsibility to provide any substantial portion of the funding needed for the projects which they may select. The Washington area can be taken as an example, where the members of the Council of Governments (COG), have taken actions on important portions of the areawide highway transportation plan in total disregard of the planning staff findings. It is suggested that the process should be expanded to require that it shall always include appropriate pricing of, and a determination of the sources of revenue for, the various elements of a plan; in order that there might always be a finding about the cost-effectiveness of various alternative systems, modes, or combinations thereof; and a finding as to who will bear the burden of levying the taxes or other charges required to finance the selected projects. It is easy for a community and it's locally elected officials to select an ambitious plan when there is little or no local price tag attached to it, just as it is with most individuals, but proper management of both family finances and

community finances, requires that decisions to "buy" something be made in terms of cost and the benefits to be expected, and these weighed in comparison with other needs.

The present transportation planning process already is done on a regionwide basis with beach urban area of more than 50,000 population being required under the statutes to have a local planning process. For the rural highway systems, the State Highways, or Transportation Departments are required to have a statewide planning process which also includes the highway and transit interest within each of the above mentioned urban areas. At State lines, there is ample machinery to provide regional planning across the boundary lines.

Thus there is adequate regional planning capability already in being. All of the planning processes are required to give appropriate consideration to the land-use and environmental requirements of federal, state and local law and ordinances and regulations, and the goals and objectives of each individual urban area. In my opinion, no further authority or directives are needed in these areas of interest. To impose any more planning bodies or levels of authority onto the present structure would begin to disrupt, beg down, and weaken the whole process rather than strengthen it. It must be accepted that the planning process, no matter from what level of government it is operated and controlled, will not of itself bring in the instant millennium, nor will it guarantee a greater ability to see further into the unknown future. Too much "planning" can be just as unsatisfactory as too little, because of the length of the operational pipeline needed to eventually arrive at the decision and action points. I feel that we are already approaching this point, and thus would not like to see any more additions to the process, unless they will clearly provide some important input that is now lacking.

If these involved planning programs are to be worth anything to us, we need to base our decisions about broad transportation policies as well as individual project and program selections, on the information which such planning and study processes provide to us. Neither the present heavy emphasis on rail mass-transit at the federal level, nor the Administration's proposals recently transmitted to the Congress relative to support for rail capital and operating costs, can be supported and justified on the basis of the Executive Branch's own studies and findings, and their reports to the Congress. These planning studies, experience, and research show us that rail mass-transit transportation is more costly than similar transportation service provided through buses operating on the street and highway network. Since most of the estimated need for funding mass-transit as set out in the 1972 and 1974 National Transportation Reports is generated by proposed rail projects, rather than bus systems, it is clearly an imprudent use of our transportation funds to provide support for the more costly alternative. The studies in this regard indicate that the capital needs for rails are about 90 percent of the total "needs" shown; and that the total economic cost of transportation by rail systems is about double that for equivalent transportation service by an all-bus system.

At present and proposed levels of funding for transit, the highway program amounts, measured in terms of relative needs and amounts of transportation services furnished, should be increased several fold, or other funding adjustments should be permitted.

For example, some of this imbalance could be corrected if the total amount of monies available in the FHWA and UMTA programs could be made totally transferrable between modes. Since the highway program already provides for large amounts of the authorizations to be available for use on transit projects, a similar provision should also be written into all of the UMTA authorizations. In this way we could achieve the full "flexibility" in use of transportation monies that has been claimed to be necessary in respect to the highway program. The planning studies would then make the cost effectiveness analyses referred to above, and other comparative data, and decisions could then be made which would provide the transportation service which would be most beneficial to the largest numbers of citizens of each community.

HIGHWAYS AND THE ECONOMY

The nation's highway plant is an integral and inseparable part of the production line in the industrial and economic base of the country. Without transportation, and especially the highway component thereof, the entire economy and industrial capability of the nation would quickly collapse. The movement of raw materials, the production of goods themselves through any manufacturing process, the daily travel of workers to and from the plants involved, and the distribution of finished products are all dependent on transportation. Likewise, the agricultural element of our national economy and livelihood, is dependent on transportation, and becoming increasingly more dependent on highways, as more rail lines are abandoned each year. With transportation accounting for about 20 percent of the Gross National Product, and the dollar value of transportation by highways accounting for about 80 percent of the total of all transportation, it is essential that adequate provision be made for

insuring the continued availability of an efficient and safe highway transportation plant in all of its parts; rural, urban, Interstate, Primary and Secondary.

FINANCING THE PROGRAMS

For a number of years, the highway systems of our nation have been financed almost entirely by user-related taxes levied as a service charge for the provision and maintenance of those facilities. In this sense, the construction and maintenance of our highway systems is like a public service corporation, no different than a private corporation performing a public service. The highway corporation, like any other business, must have revenues sufficient to cover its costs, including the constant reinvestment of some of its income in new and improved plant facilities, if it is to continue to render efficient and economical service. Careful studies have been made over the years to determine the fair shares of the cost of constructing, and maintaining, the several highway systems; and from these have been developed a schedule of taxes which should be imposed on various classes of highway users. The level of such taxes has been set to produce revenues sufficient to cover the full cost of constructing, maintaining, policing, and managing the highway systems, including the quantifiable social and environmental costs.

Except for relatively minor instances, users pay for the entire cost of the public highway stems which they use, in proportion to their amount of use of the system, and their calculated relative share of the highway's cost. The only exception to this practice is where the residential and downtown city streets are provided from real estate taxes on the premise that such taxes represent the value of a direct access to private property which the publicly

furnished street provides. The amount of such realty taxes used to provide public streets is about 20 percent of the annual total of highway expenditures in the nation. Correspondingly, the amount of direct user taxes which go into the general treasuries at national, state, and local government levels instead of being available for the highway systems is also about the same figure, so that there is an approximately equal offsetting of these diversions in both kinds of tax payments.

THE HIGHWAY TRUST FUND IN THE 1956 ACT

When the Federal Highway Trust Fund was established in 1956, some of the then existing highway-user taxes were put into the Trust Fund, plus other new taxes which were levied specifically on the highway users, and no others, for the purpose of providing the financing estimated to be required for the program. This arrangement was made to avoid having to take out of the General Fund, the additional costs of the increased highway program and thus reduce the amount of monies available for other needed programs. It was agreed that the principle of levying the cost of the highway program directly against the highway system's users, on a scale commensurate with each individual's amount of use of the system, was a fair and sound way to operate a needed federal program. Even though there were admitted national and other general benefits to the nonusers and others, no contributions were assessed against such beneficiaries. For example, no contribution was to be made from the national defense budget, despite the obvious fact that the nation's defense capability was greatly assisted by, and in fact, almost totally dependent upon the highway network, since nearly every piece of mobile equipment which the defense establishment owned or had plans to obtain, was mounted on rubber tires and designed for use on a

highway. Nonetheless, the private and commercial users of the system were assessed the system's entire cost, including those shares of the cost which were properly assignable to other beneficiaries. In this connection, it is important to remember that the Highway Trust Fund has always financed not only the Interstate System, but all of the rest of the Federal-aid highway programs involving the Primary, Urban, and Secondary systems; and more recently the Safety programs, the Forest Highways, Public Lands Highways, Research and Administration, Damage repairs, Bridge replacement, and substantial assistance to urban mass-transit, including the purchase of buses, fringe parking lots, and bus loading shelters for passengers. About half of the revenues to the fund have been derived from urban users and about half of the expenditures from the Fund have been in urban areas. None of the monies in the Trust Fund can be expended by FHWA except through the regular appropriation processes of the Congress, exactly like every other program. There is prevalent erroneous notion that the monies flew directly into the hands of FHWA and the State Highway Departments without any oversight from the Congress. The Highway Trust Fund was never intended to be a Transportation Trust Fund, it was strictly a covenant between the highway users who paid the specially levied taxes on them and no other taxpayers, for the purpose of building a badly needed national highway system.

This principle of relating a public service program's cost to a schedule of taxes paid only by the program's beneficiaries is such a business-like way to provide for many of our needed public services, that it seems far more proper to be applying this successful example to many other programs, rather than to be now proposing to dismantle both the program and it's financing arrangement.

The same financing mechanism could and should be followed in the case of the urban transit program, by setting up a schedule of user charges, plus charges to other benefitting groups, such as downtown businesses, and providing for a national corporation to administer the program.

The Committee's letter regarding this series of Hearings asks the question, "What should be the financing mechanism for Federal support of highways and other forms of transportation?", and the answer I would give is to continue the Federal Highway Trust Fund as now constituted, and to follow it's eminently successful example in the other transportation programs.

INCREASING THE EFFICIENCY OF THE HIGHWAY SYSTEMS

During the past few years, a large amount of study, research, and demonstration effort have been devoted to finding new management techniques which would produce a more efficient utilization of the highway systems in terms of their ability to move larger numbers of persons and goods in fewer vehicles, with increased safety, lower costs, and lesser consumption of petroleum fuels. Numerous reports have been made on these subjects, many of them directly to the Congress, in response to Congressional requests.

The most obvious and most frequently criticized inefficiency in our use of the highway plant occurs in the way it is used for the heavy morning and evening commuter movement to and from work places and residences. The usual traffic stream on the street system during these hours shows about 80% of the private cars being occupied by the driver only, and the average number of persons being carried is only about 1.6 per vehicle. It is clearly possible to substantially reduce the number of vehicles being used in this manner by requiring the pooling of many of such trips. It is clearly possible to double the average vehicle occupancy without any detrimental effects on the individual's travel time or trip convenience. Doing so would cut the cost to each of the pooling riders of the daily trip by 50%. However, we know from considerable research that the cost of this travel is not as important to the individual traveler as is the personal convenience of being able to set his own trip departure times, to select his travel route, and to otherwise be on his own.

For these reasons, it is highly unlikely that many of such travelers would willingly change their personal travel habits and transfer to any form of public mass-transit, regardless of its cost. Furthermore, public transit is not readily accessible or convenient to the residence or place of employment for many people, nor can it be economically provided in many other instances.

In most areas, the bus must be used as the only practical large mass-transit vehicle, and it must be operated over the street network along with other vehicles. In so doing, there will of course be some sacrifice of travel speed for the bus, but there is also a tremendous reduction in the cost of the needed roadbed, because this cost is shared with many other users, unlike the situation with a rail line which must carry the total cost by itself.

But in the majority of U. S. Cities, densities of population are not high enough to support even the normal bus type of mass-transit without substantial operational deficits, due largely to the high labor costs, which constitute from 70 percent to 80 percent of the operating costs. In these cities, and in the suburban areas of most other cities, still another form of "mass-transit" must be found. Such a mode is available in the form of the carpool, and variations thereof, such as the Vanpool as previously discussed herein.

There are still other innovations which can be employed by the managers of our street and highway systems in urban areas to increase efficiencies of the systems; such as staggered work hours and days, the so-called Flextimes, exclusive bus and carpool lanes, controlled assignment and access to parking space, use of exclusive bus streets, signal synchronization, signal overrides for high capacity bus transit vehicles, use of taxicabs as jitneys, subscription taxicab rider-pools, and many others. All of these have been tried through actual demonstrations and other testing techniques and found to be satisfactory ways to provide acceptable transportation services at low costs. They also have the ability to make much larger contributions to our efforts at improving urban transit, lowering its costs relieving traffic congestion, increasing the fuel and energy efficiencies of the total system, reducing air pollution; being able to do all these things with little expenditure of public and private monies and in a matter of two to three years time. Such are some of the methods I advance as suggestions in response to the Committee's question, "How could our present highways be utilized more efficiently to meet rural and urban needs?"

NEEDS IN OTHER PARTS OF THE HIGHWAY SYSTEMS

There is less need for such measures and less opportunity to make reductions like those just described, on most of the rural portions of the various systems. However, these portions of the system are equally as important to the functioning of a national transportation system as any of the urban commuter systems. One of the most productive areas for improving the efficiency of the rural portions of each of the systems, however, lies in the movement of the large interregional truck rigs over those portions of the highway system which parallel long distance railroad trackage. While the scheme referred to as "rail piggy-back," "trailer-on-flat-car," or similar terms has been, and still is being used to a considerable extent, there clearly is much opportunity to substantially increase the volume of this kind of transportation with savings in transportation costs, and large savings in the cost of maintaining the highway systems. The problems which must be overcome to make more extended use of this scheme lie in the fields of union labor agreements, and agreements on how to set a rate charge for the truck box to be moved; rather than in the highway field. Substantial effort should be made to work out ways to more efficiently use the truck and highway system to collect and distribute freight, and the rail trackage for the longer line-haul of truck-trailer loaded boxes and standard containers as used in overseas operations.

But the greatest needs of the highway systems are in the structural and safety deficiencies of the several hundred thousand miles of arterial and collector routes which comprise the rural and urban primary and feeder networks, which together carry nearly three-fourths of all of America's highway travel, and are the locale of the majority of highway accidents and fatalities. While most

of the discussion of highway transportation has focused on the debate about moving the urban commuter, this movement represents only about 5 percent of the total highway problem. The other 95 percent should be receiving our major attention and funding for it is these urban and rural routes which are in greatest need of improvement for safety, economic, and transportation efficiency reasons. Many of these routes are carrying volumes close to or in excess of their safe capacity, and in so doing have become hazardous for all users. The needs of these systems are estimated at more than \$400 billion to 1990, a figure which is about 20 times the remaining cost to complete the Interstate System, and many times the estimated needs for all mass-transit projects in the same period of time. Most of our available funds and our effort is needed here. Almost the only problems are the inadequacy of funding. At presently proposed levels of funding for these systems, it will take nearly a hundred years to meet the needs which are estimated for the next 15 years. A substantial increase in the funding levels for these parts of the total system is urgently needed, and some portion of any newly imposed highway user taxes should be put into the Highway Trust Fund in addition to all of the present taxes and used for safety and transportation improvements on these systems.

APPLYING A COST-EFFECTIVENESS TEST

In the overall development of national transportation policy, it is very important that we apply the yardstick of cost-effectiveness to our several modes which comprise the total system. We must rid ourselves of the notion that all highways and auto transportation are bad, and only high-cost rail transit systems are good for every situation. All schemes should be examined for cost-effectiveness and service capability to move both people and goods.

A TRANSPORTATION CORRIDOR IS A PERMANENT NEED

We must remember that some form of a transportation right-of-way, or corridor, must be provided within and between our cities so long as men inhabit the earth, and that such a system of routes will be needed without respect to what form of vehicle moves over those routes, or the kind of fuel that is used to power those vehicles. There were extensive transportation systems linking cities by road before there were any automobiles or trucks, or even before the wheel itself had been invented, and many of these old roads are still in use. Similar corridors for the transport of men and their commerce will forever be necessary, regardless of the kind of vehicles and fuels we use in future. Therefore, we must not allow ourselves to get all "hung-up" over the question of our present vehicles and fuels, and decide to stop building and improving our highway network simply because we think we see the end of the present fuel sources. Certainly we shall by that unknown date when our petroleum supplies are exhausted, have found another fuel by which to move ourselves and our goods over the same transportation corridors, or highways that we use today, even though we cannot foresee today what that fuel or vehicle will be. Neither did our forebears of a hundred years ago visualize the vehicle and fuels we use today on the road and transportation network which they were then building for us.

SOME RECOMMENDATIONS FOR THIS YEAR

By this statement, the following conclusions and recommendations are made for consideration in the development of our national transportation policy and legislation in 1975.

1. The general planning process for highways and urban transportation is adequate to identify needs and annual work programs, except that

2. A pricing and cost-effectiveness analysis should be added.

3. Excessive emphasis is being placed on the urban commuter part of the much larger total transportation picture.

4. Rail transit particularly is receiving undue emphasis as the remedy for our urban transportation problems.

5. Bus transit is much cheaper than rail transit as an urban transportation system, and it consumes less energy, creates less air pollution, requires less public funding, and is quickly available .

6. Immediate attention should be given to means which will require the more efficient people-mover systems described herein to be substituted for the excessive numbers of single occupant commuter vehicles.

7. Such vehicles as Vanpools, carpools, subscription buses, group taxis, jitneys, and others should be used in pool systems to obtain the most fuel efficient, least air polluting, and lowest cost form of urban commuting and should be made a required part of the urban transportation planning process.

8. Substantially increased funding should be provided for the major arterial and collector routes, both in urban and rural area.

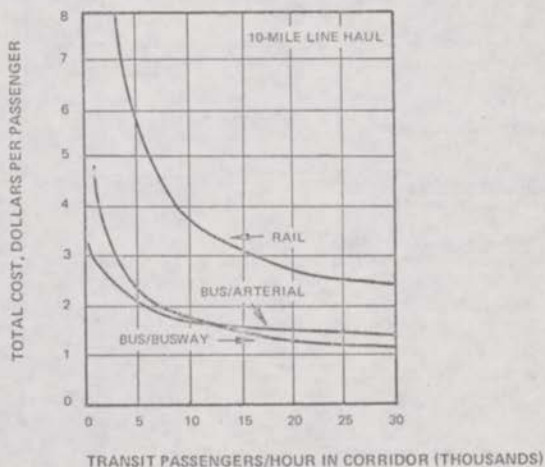
9. A separate funding mechanism for public mass-transit systems should be provided, patterned after the present Highway Trust Fund.

10. The present Highway Trust Fund should be extended indefinitely for highway improvement programs only.

11. Funds available through UMTA for urban mass-transit projects should be made transferrable to meet highway needs in order to create the same flexibility that is available under the present FHWA authorizations.

A carefully structured national transportation policy which provides for the continuing improvement in our physical transportation plant and the management methods which we utilize to operate it, will contribute to the solution of our highway transportation problems, rather than being the problem.

EVALUATION OF RAIL RAPID TRANSIT AND EXPRESS BUS SERVICE IN THE URBAN COMMUTER MARKET



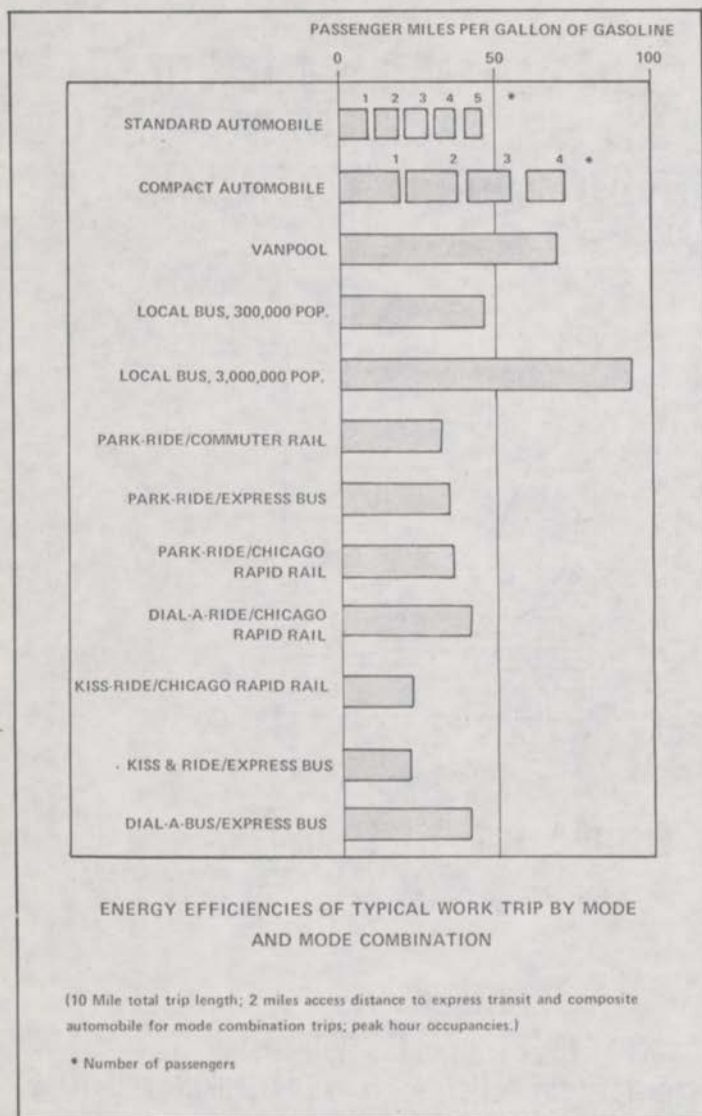
INSTITUTE FOR DEFENSE ANALYSES



October 1973

DEPARTMENT OF TRANSPORTATION

ASSISTANT SECRETARY FOR POLICY, PLANS AND INTERNATIONAL AFFAIRS
OFFICE OF TRANSPORTATION PLANNING ANALYSIS



As shown in this bar graph of energy efficiencies for a 10-mile work trip, energy savings would result if workers decided to ride in carpools. The local bus in cities of three million population is by far the most energy efficient, exceeding all forms of rail and express bus. But the vanpool and compact car with four people are strong contenders.

Transportation Energy Conservation Options

ACTION	"Ultimate" Savings as Percent of Energy	Year to Achieve Maximum Savings		Additional Investment (billion \$)
Passenger Transport				
Increase Auto Efficiency	20.0+%	20 yrs.	\$10.00	neg. \$ 0.02
Carpooling	13.9%	2+ yrs.		
Reduce Speeds	2.9%	3 yrs.		
(Using Motor Vehicles)				
Shift from Autos to Urban Transit	1.8%	10 yrs.	\$ 6.20	\$10.02—
Shift from Autos to Inter-city Bus and Rail	2.9%	15 yrs.	\$ 6.00	
Shift from Autos to Bicycles and Walking	1.8%	10 yrs.	\$ 2.00	
(Using Rails, Transit, Cycles)				
	6.5%	15 yrs.		\$14.20
Freight Transport				
Increase Truck Efficiency	6.3%	15 yrs.	\$ 3.00	neg.
Increase Allowable Truck Loads	3.2%	10 yrs.		
(Using Trucks)				
Shift from Trucks to Rails	1.6%	15 yrs.	\$15.00	\$ 3.00—
(Using Rails)				
	1.6%	15 yrs.		\$15.00
Grand Total Savings—Highways	46.3+%	20 yrs.		under \$13.02
Grand Total Savings—Rail/Transit	8.1%	15 yrs.		\$29.20

This chart shows the results of a study for the U.S. Department of Transportation of nine different methods for conserving fuel consumed in transportation. Each of the possible energy conservation measures is analyzed according to the potential energy savings, the time required to achieve the savings, and the additional investment required.

Senator BENTSEN. We will let Dr. Commoner testify and then we will return to questions.

I can see the debate is going to go already.

STATEMENT OF DR. BARRY COMMONER, CHAIRMAN, BOARD OF DIRECTORS, SCIENTISTS' INSTITUTE FOR PUBLIC INFORMATION

Dr. COMMONER. I will be brief and get to the questioning as quickly as I can.

I am glad to be here because I think you have undertaken a very important examination of a problem which the country cannot possibly avoid. It is obviously a timely issue, because our transportation system is in trouble. The railroads are in trouble. The airlines are in trouble. I daresay it is a fact that the automobile industry is in trouble. I think we are faced with an issue that we have to resolve, and as my contribution, I would like to suggest an approach toward the goal that you have set of trying to develop an integrated transportation policy.

Now, the approach that I want to suggest has already been laid out in some part by Mr. Boyd, and that is that what we have to do is learn how to fit the separate modes of transportation into an integrated system. Specifically, I want to address myself to the question of how do you discover what the best fit is. How do you decide where to use autos, where to use rails, where to use air?

Specifically, I am going to propose a way of doing it which can be termed "productivity analysis." Productivity is very simply the ratio between output and input. It is not always in terms of dollars, though. The question is, "What goods and services do we get out of transportation per unit resource consumed by it?"

The various modes of transportation compete with one another. For example, trucks and railroads can do very much the same thing with respect to freight. So you have to make a judgment as to when you choose railroads, and when you choose trucks. What I am suggesting is that the most effective measure is to ask the question, "What output do we get per unit of input?" Look at those numbers and then make the comparison.

Now, this approach would be useless if it were not true that the inputs are limited. We all know that energy is now rapidly becoming limited in supply. The other inputs into transportation are also becoming limited. For example, there is also a great deal of concern now about the shortage of capital.

Therefore, we have to examine each mode of transportation with respect to the efficiency with which it converts capital into passenger-miles or ton-miles, just as we have to ask how efficiently does a mode of transportation convert fuel into passenger-miles and ton-miles.

Now, let me propose there is another shortage we have to be concerned with and that is of jobs. Unemployment is a very serious issue. Therefore, it is important to ask: What is the ratio of jobs to ton-miles and passenger-miles? All of these ratios are productivities. I am not going to go into the details of how these have been computed, since that is described in the written testimony submitted for the record.

We have made a series of computations which are summarized in the last table of my testimony. I think it is called table 13. This is an examination of the productivity of various modes of transportation with respect to energy, capital, labor, land (and safety is considered as well).

In order to determine how much capital is used by highway modes as compared to others, you have to make an assessment of the amount of the investment in highways that ought to be assigned to trucks, buses and cars. That is not an easy thing to do. Various assumptions are involved. Nevertheless, I think these data represent a fair approximation of the relationship among the various modes. Let me just point out some of the key things that emerge from this comparison.

The energy situation is, of course, well-known. Buses and railroads carry more passengers than other modes of transportation per unit of fuel burned. A lot of these relationships could be improved by increasing load factors. The potential efficiency of railroads in carrying passengers per unit of fuel is considerably higher than it is now simply because the railroads are not adequately used.

With respect to freight, the data are clear. Trucks use about four times as much fuel per ton-mile carried as railroads. I am not going to comment on pipelines and water modes, because they don't compete with the others with respect to the general necessity of their services. Generally, they are better because it is rather easy to carry certain, limited types of freight in that way.

Now, the capital figures, I think, are extremely important. First, let me point out that much more capital is involved in highway modes than in all the other modes put together. In table 5, you can see the capital invested in all modes of transit. It turns out that all the highway modes involved \$270 billion worth of capital. All the other modes put together—railroads, pipeline, water, and air—amount to a \$70 billion investment.

The question which is taken up in table 13 is what are we getting for that capital investment. In other words, how many passenger-miles per year do we get per dollar invested in capital; how many ton-miles per year? Let's look at the freight figures, because I think they are most relevant. What you see immediately, that to me was quite a surprise, is that the productivity of capital in moving freight by railroads is considerably higher than the productivity of capital in truck freight. In other words, for a dollar invested in moving freight, you can get roughly three times as many ton-miles in railroad freight as you can by investing it in truck freight.

Senator BENTSEN. Have you moved to—which table are you on now?

Dr. COMMONER. Table 13.

Senator BENTSEN. All right. Please proceed.

Dr. COMMONER. To be specific about it, looking at trucks, we see that in 1970, for every dollar of capital invested, the ton-miles of freight movement produced per year were 6.70; whereas with railroads, every dollar invested in capital produced 19.33 by one estimate, and 22 ton-miles by another estimate. In other words, railroads were more productive of freight movement per dollar of capital invested than trucks by a factor of three.

To me, that is a surprise because one of the conventional wisdoms is that rails are more capital consumptive than trucks. The fact is they are less so than trucks. We have to admit at once that the railroads now need more capital investment in order to maintain their facilities. Even if the present capital of the railroads was doubled, the productivity of the capital—that is, the yield of output in freight—would still be significantly higher than that of trucks.

Thus, both per unit consumption of fuel and per unit investment of capital, the railroads yield considerably more freight movement than trucks.

Senator DOMENICI. Mr. Chairman, might I just ask for a clarification on this one point?

Senator BENTSEN. All right. We were going to hold the questions until we are finished, but go ahead.

Senator DOMENICI. On that particular one, I just wanted to know what is the scope of capital investment as to trucks versus the scope of capital investment of railroads?

Dr. COMMONER. That is all laid out in my prepared testimony. I will outline it for you. It includes the investment in the vehicles, the investment in fixed structures such as terminals, and the investment in the right-of-way.

Now, in the case of trucks, what we have done is to take the capital cost of the highway systems used by the trucks and using the proper transportation estimates, apportioned it among the users—trucks, autos, and buses. One can argue about how you cut it up, but that doesn't have a tremendously big effect.

Senator DOMENICI. Thank you, Mr. Chairman.

Dr. COMMONER. I should point out, I am lumping public and private capital here. I think that is justified because the economists tell us in periods of capital shortage, it is just as important to consider the amount of capital that is used up by the Government expenditures as the amount of capital used by private expenditures.

Let me conclude quickly now. The point I am making—I think the numbers can probably be modified to some extent—is this: If we ask the functional-use question, what use do we get out of different modes of transportation per unit input, it turns out there are very striking differences.

The railroad is by far the most productive mode of transportation for freight, and it could be for passenger use as well. In other words, the capital investment and fuel investment could be much lower per passenger-mile. One of the things that emerges is that railroads use less labor than trucks. One reason why that is true is that railroads have cut down on passenger traffic which requires much more labor than freight does.

What do we do with these kinds of numbers? The striking thing to me is that the actual rates of growth of the different modes of transportation are exactly the reverse of their differences in functional productivity. Truck traffic is growing faster than rail traffic. Auto traffic is growing faster than rail passenger traffic.

In other words, we are not guiding the use of different modes of transportation by functional criteria. How are we guiding it? The way we are guiding it, as far as I can tell, is by the effort to maximize the

profitability of private investment. The best example of this is what is being done with the Northeast railway system: a considerable portion of the track is going to be abandoned, the freight turned over to trucks, which will reduce the productivity of energy and reduce the productivity of capital. The reason it is being done is that those parts of the rail systems do not make a profit—the criterion being used is profitability. All the other criteria, the usefulness of the energy, the usefulness of the capital, the jobs available, are being set aside in favor of one criterion, profitability. I think it is probably true that there is no way to organize a functional integrated transit system based solely on the criterion of profitability.

The railroads are inherently unprofitable. The best evidence for that is in the Department of Transportation's arguments, with respect to the Northeast railway reorganization, against nationalization. They assert that they are opposed to nationalization because all the nationalized railways run at a loss.

Now, as you know, nearly all the European railways and Japanese railways are nationalized, and indeed, they run at a loss. But the interesting question is, why? The main reason is that they operate an unprofitable service; namely, carrying passengers. We know it is unprofitable because the railways in the United States have shown us that.

The U.S. railways get about 3 percent of their revenue from passenger travel. The smallest figure for any nationalized European railway is 25 percent, for the German Federated Railways. The Japanese railways get 80 percent of their revenue from passenger traffic. They run at a loss in proportion to the attention they give to passenger traffic. What does that mean? It means that those countries have decided, on social grounds, that they would rather save fuel, save the capital, save the land, that railways enable them to in order to get a given service, and to make up the difference in cost in terms of taxes.

What I am suggesting then is that I don't see any way in which this committee can decide on how to design an integrated transportation system until and unless it faces an initial and admittedly very difficult question. It is time, I think, to consider the public ownership of all or part of our transportation system.

That question answered, until we decide as a Nation whether we are willing to sacrifice the efficiency of transportation on the altar of profitability, I see no way of adopting rational criteria for designing the system; and without adopting the criterion of resource productivity, I see no way of achieving your aim of organizing an integrated transportation system.

Now, I realize I have made your job more difficult than it might have appeared in the beginning. It was already a difficult job when you just talked about transportation, but I am afraid we cannot avoid the issue of public versus private ownership of all aspects of transportation if we want to have a reasonably sound transportation policy. I think the country has become old enough now to be able to tolerate such a difficult political question.

Senator BENTSEN. Thank you.

[Dr. Commoner's complete statement follows:]

Testimony before

United States Senate Transportation
Subcommittee

Hearings on

"The Future of the Highway Program"

Washington, D. C.
July 30, 1975

by

Barry Commoner
Director*

Chairman, Board of Directors,
Scientists' Institute for Public Information

(The data reported here are based on a preliminary study
being carried out at the Center for the Biology of Natural
Systems under the direction of Barry Commoner, with the
assistance of Robert E. Scott.)

***CBNS**

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This Committee has undertaken an extremely important and well-chosen task: to determine how highways fit into an integrated transportation system. In adopting this approach the Committee has recognized that utilization of different modes of transportation ought to be based on a common criterion: how well they contribute to the effectiveness of the transportation system as a whole. This means that the value of the highways, and of other elements of the transportation system, must be judged by the end-use which is common to all of them: the movement of people and goods.

As my own contribution to your deliberations I should like to suggest an analytical approach that can help to determine how the highways and other elements of the transportation system can best be fitted into such an integrated transportation system. It is based on a preliminary study carried out at the Center for the Biology of Natural Systems, and described in detail in the appendix attached to these remarks.

The approach I have in mind might be termed productivity analysis. The concept of productivity is, of course, not a new one, having been used extensively in the field of economics. The most familiar example of a productivity measure is an auto's gas mileage: miles travelled per gallon of gasoline used. More generally, this measurement recognizes the auto as a device that uses certain necessary resources (technically, inputs) in order to produce certain desired

results, goods or services (technically, outputs). The productivity is simply a ratio: the amount of a given output obtained from an amount of a specified input; hence, the number of miles travelled (output) per unit of fuel used (input).

Productivity data enable us to compare two different ways of achieving the same output by determining the relative costs, in input, required to achieve this end result. For example a freight train and an intercity truck can produce essentially the same output, which can be measured in terms of ton-miles of freight carried. Each carrier uses a number of inputs: fuel, labor, investment capital (to purchase the equipment and to build the highway or railway), land and so on. A good way, then, to compare the behavior of the two carriers is to compute the various productivities: energy productivity (i.e., ton-miles of freight carried per BTU of fuel used), capital productivity (i.e., ton-miles of freight carried per year per dollars of capital invested), labor productivity (i.e., ton-miles of freight carried per man-hours of labor used), and so on. From such a set of numbers one can easily determine what it will cost, in fuel, invested capital and labor to achieve a particular output by the two alternative carriers. Then a rational decision can be made as to where, in the overall integrated transportation system, each mode should be used in order to maximize the return (in output) received for each input of interest.

Such an analysis can become a basis for decision-making in designing the integrated transportation system. The task of assembling an integrated transportation system consists, basically, of fitting together a variety of different component parts. Productivity analysis is a way of determining which component part will fit best into a particular niche in the overall system--most efficiently converting inputs into the desired output.

In order to illustrate the approach we have assembled some of the available data about different modes of transportation and have computed from them several types of productivities. The data are not presented as definitive measures of these productivities, since a number of refinements are yet to be made, but mainly to illustrate how one can use this approach in the design of an integrated transportation system.

There are, of course, many criteria in addition to energy, capital and labor involved in evaluating a particular mode of transportation. Consumers are extremely concerned about factors such as speed, convenience, flexibility, comfort, safety and cleanliness. Another extremely important criterion is the impact of a transportation system, or a part of it, on patterns of population distribution. For example, locating an airport in an unpopulated area near a city and connecting the two by a highway, inevitably brings an influx of people into the previously unpopulated area. Such processes have contributed considerably to the post-war urban sprawl process--

often a largely accidental, "secondary impact," of decisions about transportation. These factors are more difficult to evaluate than the basic ones such as the use of energy, capital and labor, but the same overall approach can be used in almost every case.

To illustrate the approach, let us consider the roles of different modes of intercity transportation. The relevant productivity data are given in the attached tables.

Energy productivities can be computed quite directly for different modes of transportation from the ratio of the output (passenger-miles or ton-miles) to the amount of fuel used. Computations of this sort, reported by Eric Hirst (shown in Table 1), reveal that in terms of energy productivity railroads and buses are the most efficient means of moving people and that railroads are the most efficient means of moving freight (except for waterways and pipelines, which are restricted in their distribution and in types of freight).

Computations of the productivities of capital invested in various modes of transportation are rather more complex. For example, since the highways are used in common by autos, buses and trucks, the capital cost of constructing the highways must somehow be apportioned among these different modes of transportation. This apportionment is further complicated by the fact that, for a given amount of travel, the vehicles differ in their damage to the highway and therefore in their contribution to the cost of replacing it.

Table 2 describes the relative usage of intercity highways by autos, trucks and buses. It shows that about 80 percent of highway usage (measured in vehicle-miles) is due to autos and about 19 percent is due to trucks, with buses accounting for less than one percent. However, because of their size and weight trucks do a disproportionate amount of highway damage with respect to the number of miles they travel. Table 3 reflects this fact and shows the allocation of capital based on the relative wear and tear due to each mode of travel. This highway usage data is based on information taken from "Capital Stock Measures for Transportation."

Table 4 records the total capital investment in highways and in the vehicles that use them. By combining the data of Tables 3 and 4 we can arrive at an estimate of the total capital investment represented by the three classes of highway vehicles, based on capital used to purchase equipment, terminals, and the assigned fraction of highway costs. These data are shown in Table 5, together with comparable data for capital invested in non-highway modes of transportation. This table shows that in 1970, capital invested in intercity auto travel amounted to about \$236 billion. Capital invested in commercial trucks amounted to \$30 billion in 1970; the value for buses is comparatively

very small. Between 1960 and 1970 capital invested in commercial trucks more than doubled, while that invested in auto travel increased only 77 percent and that invested in bus travel showed almost no increase. (Total investment in truck is roughly three times the amount we are considering.) It is clear that total truck operations account for a considerable and rapidly growing portion of the capital invested in highway transportation.

Table 5 enables a comparison of the capital investment involved in highway and non-highway modes of transportation. The total capital invested in these non-highway modes of transportation in 1970 was only about \$70 billion--far less than the total of about \$270 billion invested in highway travel. Even taking into account the use of capital represented by autos for non-intercity travel, the capital invested in highway transportation is considerably greater than all other modes put together.

Particularly striking is the comparison between trucks and railroads. It is often assumed that a chief drawback of railroad transportation is the heavy demand for capital. Yet the capital invested in railroads in 1970 was less than half the total capital invested in truck freight (not shown). Note also the well-known fact that new railroad

investment is essentially at a standstill, while capital invested in truck freight more than doubled between 1960 and 1970.

These data on the input of capital into the several transportation modes together with the data regarding the two relevant outputs (passenger-miles of passenger travel and ton-miles of freight) shown in Table 7, allow us to compute the several capital productivities. These are shown in Table 8. This shows that the productivities of capital invested in auto, railroad and air passenger travel are approximately the same. In contrast, bus passenger traffic stands out as yielding the largest output per dollar of invested capital. However, the value for railroad passenger traffic should not be regarded as an accurate one. Since such a small part of railroad revenue is derived from passenger traffic at present it is difficult to evaluate the amount of capital involved from overall statistics, such as these. With respect to freight traffic, railroads yield the highest capital productivity, apart from the two systems which are limited with respect to location and goods carried, i.e., water transport and pipelines.

Labor productivity data are presented in Table 9. With respect to passenger traffic, railroads, busses and airlines have about equal values. With respect to freight traffic, pipelines, which use relatively little labor, have the

highest labor productivity, followed by water transportation, railroads, trucks and airlines, in that order. The labor productivity of railroad freight appears to be about six times higher than that of truck freight.

The productivity of the land used in different modes of transportation is shown in Table 11. Busses have a high productivity value because they carry a large number of passengers relative to their highway usage. One noteworthy item is that the land productivity of airlines for passenger traffic is not very different from that of autos and railroads. Land productivity for freight traffic is by far the best in the case of railroads, being four times higher than the comparable value for trucks.

One of the costs of transportation is accidents and some relevant comparative data are presented in Table 12. The well-known high risk involved in auto traffic is evident, along with the surprisingly high figure for railroads, which is probably the result of the recent deterioration in the upkeep of these operations.

Other factors that influence possible roles of different modes of transportation do not readily yield to such quantitative data, but some general statements can be made. As far as environmental impact is concerned (noise and air pollution) railroads are definitely superior to both the private auto and to airlines. Air pollution from

transportation is essentially equivalent to the amount of fuel burned; because of its superior energy productivity, the effect of railroads on air pollution is least, among the three modes of transportation. Noise effects are more difficult to compare, but common experience would indicate that railroads are the least troublesome.

Now consider speed and convenience. While airplanes travel through the air quite rapidly there is generally at least a one-hour turnaround time at both ends of the journey, due in part to the distance between airports and areas of dense population. Traffic and weather delays in landing may add considerably to this figure. The train turnaround time is, of course, much shorter, because the stations can be centrally located in urban areas. High-speed trains such as those now common in Europe and Japan, that can travel at over 100 mph, can readily compete with air travel's speed and convenience, for distances up to about 500 miles. Such trains could be equally competitive with auto travel in respect to these same criteria. Thus, judged by standards of energy productivity, capital productivity, speed and convenience, for intercity distances of 500 miles or less, the most efficient mode of passenger travel, based on our data, is the railroad. Obviously this fact has serious implications for the way in which airline routes are fitted into an integrated transportation system.

With these kinds of data in hand one can also evaluate the impacts of expected future developments on the effectiveness of different modes of transportation. For example, knowing that private autos, trucks and airplanes are relatively low in energy productivity as compared with railroads and busses, it becomes apparent that the former modes of transportation will be effected most severely by developing petroleum shortages, and by increased prices. As petroleum supplies diminish railroads will develop a new advantage: if they are electrified they can be operated on energy derived from coal.

We can expect, in the next decade or so, not only shortages of fuel but shortages of capital as well. This has been made clear by several recent reports, which warn that industry (and especially the energy industry, which has particularly heavy needs for capital) must expect considerable difficulty in raising the capital needed to enable production to meet demand. This means, once more, that railroads rather than highway modes of transport will have the advantage, since they can produce relatively more output per dollar of investment.

Private automobiles are also very capital-intensive, and are becoming more so every year. The capital involved in the purchase of autos must be obtained by the consumer. If the anticipated capital shortage will be a problem for the large

companies, it will be a crisis for the small consumer. This is a result of the manner in which the available supply of credit is rationed in the market place. Governments and large corporations are the best "credit risks" so they have the highest priority for the banker's money. Small businesses come next, and the consumer is at the end of the line. A good indication of this fact is the rapid fluctuation of money available in the housing market. The ebbs and flows in this sector are much greater than in the financial market as a whole. The same will be true for consumer credit for the purchase of cars.

This means that if the public has no alternative to the use of private autos, they will be caught in a very serious economic squeeze. Under present conditions the private auto is the only practical form of mobility available to the consumer. For 30 years the government has been subsidizing the automobile system through the construction of roads. It has been documented that several auto-industry companies purchased the public transit systems of many cities in the U. S., converted them to busses and then let them die. Now the consumer has no choice. He must have a car to get to his job, to shop, and to live in the urban environment. Anyone who cannot manage to own or drive an auto becomes a disenfranchised resident of the city--about 20 percent of

the people living in urban areas are too young, too old, too poor or too handicapped to drive. While the individual suburbanite may feel that the quality of his life has improved over the last thirty years, this 20 percent of the population has had its lot drastically worsened, with respect to mobility.

All of the foregoing data are shown together in Table 13. From a table of this kind one can begin to sense how the various modes of transportation can best be fitted into an integrated system. Obviously, this is an enormous task which would require data, of the type shown in Table 13, but far more detailed, and fully confirmed as to accuracy. Nevertheless it is worth discussing here, as a kind of exercise in the design of an integrated transportation system, particularly with respect to the land modes of transport: auto, bus, truck and railroad.

First consider the strikingly different productivities of trucks and railroads with respect to freight traffic. The advantages of railroads with respect to energy productivity and the use of land have now been widely recognized. But it also appears that railroads are more productive than trucks with respect to invested capital. Part of this advantage, at present, is certainly artificial in that the railroads have been deferring capital investment in recent years. However,

even if the present capital goods of the railroads were doubled--which would be sufficient to considerably improve their operations--railroads would still have a significant advantage over trucks with respect to capital productivity.

Thus with respect to three resources that are likely to be in increasingly short supply (and therefore increasingly costly)--energy, capital and land--railroads are obviously the transportation mode of choice for freight traffic. A major disadvantage, judged by the criterion of creating employment, is that the labor productivity of railroads is higher than that of trucks, so that fewer jobs are available relative to the amount of freight hauled. However, when we include the potential of railroads for passenger traffic, this disadvantage is considerably reduced.

Railroads are, of course, a very energy-efficient way of carrying passengers. Although the 1970 data indicate that busses have a better energy productivity for passenger traffic, it is likely this reflects, to a degree, the poor load factor that often characterizes railroad passenger traffic. When compared to the railroads of the world, U. S. railroads stand out with respect to the minute amount of their operations that are devoted to passenger traffic. Only 3.7 percent of U. S. railroad revenue is derived from passenger traffic; the smallest comparable figure for any European railroad is 25 percent, and the Japanese railroad system

derives 80 percent of its revenue from passenger traffic. There is no physical reason why the U. S. railroads could not carry very many more passengers than they do now and, as indicated earlier, for runs up to 500 miles even compete with airlines for speed. Such a change would go a long way toward relieving the disadvantage of railroads with respect to labor productivity, for passenger traffic is relatively labor-intensive.

It should be evident from even these cursory considerations of the differing productivities of the various modes of land transportation, that railroads ought to be the mainstay of intercity traffic. This would yield the maximum returns in people and freight moved from the necessary inputs of energy, capital, land and employment opportunities.

Once this basic fact is taken into account, other relationships become apparent as well. For example, one reason that people are likely to resist the use of railroads and busses for intercity traffic, is that once they are deposited in the city the present urban transport systems do not give them the convenience of movement that they desire. As a result people are likely to continue to drive their own cars from one city to another for the sake of being able to move around once they arrive. It follows, then, that a good urban public transit system is essential if we are to take

take advantage of the most efficient means of intercity transportation. The two aspects of the problem must be integrated.

Obviously none of this is happening at present and we need to ask why. In fact, present transportation policy seems to be moving in the opposite direction. Thus the current plans for reorganizing the Northeast railroads would shift considerable freight to trucks, thereby increasing energy and capital demand at a time when they are in short supply. The reason given for the counterproductive proposal to dismantle a good part of the Northeast railroad system is that those parts are not profitable. Here the operational criterion is not the maximization of the transportation system's output (freight, in this case) relative to the inputs of energy, capital, land, and so forth. Instead, all of these advantages are being set aside to accommodate an overriding criterion: profit.

There is a justification for this approach that once might have been regarded as reasonable. For a long time it was assumed that, given the free market-based operation of the private enterprise system, we can expect that those enterprises which are most efficient in their use of resources relative to their output would have the lowest costs relative to revenue and would therefore be most profitable. If this were the case profitability would be an

excellent index of overall productivity, or efficiency, and therefore a proper criterion for judging the social value of a particular mode of transportation.

However, even the most cursory examination of transportation problems in the U. S. today shows that this expectation has not at all worked out. The railroads--in general the most highly productive means of moving people and freight--are precisely the mode of transportation which is least profitable. Airlines, which clearly have a unique, irreplaceable function in any integrated transportation system, are nearly as unprofitable as railroads. On the other hand, trucks and autos, which have very low productivities have generated a great deal of profit, not only for their operators, but for the manufacturers as well.

In fact, there actually seems to be an inherent conflict between operating with good resource productivity and operating at a profit. One piece of relevant evidence is that the major railroads of Europe and Japan regularly operate at a loss (which is possible because they are nationalized). The basic difference between these railroads and those (privately owned) U. S. and Canadian railroads that manage to operate at a profit is revealed in a comparative study published by the Union Pacific Railroad in 1970. This study showed that in the U. S., railroad labor productivity (as measured by earnings per employee) is much higher than it is

in the nationalized railroads--an average of \$23,200 in earnings per employee as compared with values that range from \$4,000 to \$9,500 per employee. In turn, this difference is associated with a considerable difference in the attention given to passenger traffic: In U. S. railroads passenger traffic accounts for only about three percent of revenue, whereas in the nationalized railroads it accounts for 25-80 percent. Thus, that the nationalized railroads of Europe and Japan run at a financial loss reflects a deliberate choice by those nations to provide the most labor-intensive and therefore costly form of rail service: passenger traffic. It would seem, in this case, that one cannot take advantage of the high level of productivity of energy and other inputs that are characteristic of railroads unless the goal of profitability is given up.

The contrast between truck and railroad freight is also illuminating. For-hire trucks (in 1970) carried about 200 billion ton-miles of freight and yielded about \$18 billion in revenue. In contrast railroads carried about 770 billion ton-miles of freight and produced about \$11 billion in revenue. At the same time the trucks used relatively large amounts of energy and labor (as compared to railroads), as well as capital (a good deal of it provided by the public in the form of highways). As a result, while trucks yielded more revenue than railroads, per ton-mile of freight, their operating costs were also higher. It would

appear that even taking into account the larger profit of trucking, as compared with railroads, the latter are the more "thrifty" method of moving freight, in the sense that they can achieve the same real output at lower costs in economic and physical resources. In a world in which such resources are rapidly becoming more limited in availability, it should be clear, I believe, that, of these two modes of freight transportation, the railroads must inevitably dominate in the future. This conclusion, in turn, means that we are not likely to need the sort of heavy investment of public capital in highways that has characterized past practice.

Thus, it becomes evident that we can take two very divergent approaches to the organization of the nation's transportation system. The present approach is based on the assumption that the transportation system should provide opportunities for profitable private investment. Public support enters the system in the form of subsidies (for example, construction and maintenance of highway and aviation facilities at public expense) where these seem to be needed to support private ventures, or to rescue failed ventures such as railroads. It is apparent, I believe, that this approach has thus far failed to develop an integrated transportation system--i.e., one in which the different modes are used in ways that maximize their efficient participation in the overall system. Profitability is simply not a good

index of the productivity of a given mode of transportation --and therefore not a good guide to how it can best be incorporated into an integrated system of transportation.

The alternative approach is based on the assumption that each particular mode of transportation ought to be fitted into the integrated system in ways that maximize, in so far as possible, the productivity of energy, capital, labor and other essential inputs. These criteria, together with additional ones such as speed and convenience, should make it possible to develop a functional design for the transportation system as a whole that can yield the desired results at minimum cost in physical and economic resources.

However, it appears that the two approaches may be mutually exclusive, for the recent history of our transportation problems indicates, I believe, that the productivity of transportation has often been reduced because of the effort to maximize profitability. This means that if Congress is determined to develop an integrated transportation system--which is, of course, essential to the nation's welfare--it will need to confront an initial, fundamental political question: Is the nation ready to give up the already failed attempt to organize transportation according to policies that maximize private profit, and instead develop an integrated system of transportation that maximizes resource productivity even if, in order to achieve this goal, part or all of the system must be publicly owned?

APPENDIX: PRODUCTIVITY TABLES

Table 1**

Energy Productivities

	1960		1970	
	Passenger miles per 10,000 BTU	Ton miles per 10,000 BTU	Passenger miles per 10,000 BTU	Ton miles per 10,000 BTU
Automobile urban	1.3	*	1.2	
rural	3.0	*	2.9	
Total	1.8	*	1.1	
Truck	*	3.4	*	3.6
Air	1.4	0.3	1.2	0.2
Railroads	3.4	16.7	3.4	13.0
Bus inter-city	6.7	*	6.3	*
urban	2.9	*	2.7	*
Waterways	*	16.1	*	14.7
Pipelines	*	100	*	52.6

**Hirst, E., "Energy Intensiveness of Passenger and Freight Transport Modes," Oak Ridge National Laboratory, Oak Ridge, Tenn., April, 1973.

*Not applicable.

DATA FOR COMPUTING CAPITAL PRODUCTIVITIES
OF ALTERNATIVE FORMS OF TRANSPORTATION

Table 2

Total Vehicle Miles of Travel (VMT)^{1,3}

	1960		1970	
	Billion vehicle miles	% of total	Billion vehicle miles	% of total
Auto	588.1	82.1	901	80.6
Truck	126.4	17.6	214.7	19.2
Bus ²	2.3	.3	2.8	.2
TOTAL	716.8	100	1,118.5	100

¹1974 Statistical Handbook of the U.S., USGPO, Washington, D.C., p. 556.

²Intercity bus miles only.

³In computing the capital productivity of highway vehicles one difficult problem is to apportion the fixed capital stock in highway structures between cars, trucks and buses. One way this can be done is to base an apportionment strictly on vehicle miles of travel. However, it is an acknowledged fact that trucks have a larger impact on road surface deterioration; therefore we refer the reader to Table 3, which shows the results of one study's analysis of the breakdown of public highway capital. We are interested here only in auto and taxicab, commercial trucking and intercity bus. We will ignore the other categories.

Table 3

The Allocation of Highway Capital⁴
(percentages)

Transportation Mode	Interstate System	State System	County and Township Roads	Local City Streets	Other Roads	Weighted Average ⁵ 1960	Weighted Average ⁵ 1970
Auto	64.73	62.55	60.76	71.50	100.00	64.47	64.86
Local Bus	.38	.45	.16	1.64	--		
Intercity Bus	.58	.49	.37	.16	--	.42	.45
School Bus	.11	.54	1.73	.29	--		
Commercial Trucking	16.03	12.56	9.15	5.59	--	11.21	12.06
Private Trucking	17.91	23.19	27.73	19.80	--		
Taxicab (combined later with auto)	.26	.22	.10	1.02	--	.31	.30
TOTAL	100.00	100.00	100.00	100.00	100.00	76.41	77.67

⁴Capital Stock Resources for Transportation, U.S. Department of Transportation, USGPO, Washington, D.C., December, 1974, pp. 4-14.

⁵Computed from the actual amounts in each category that we will consider. Derived from Capital Stock Measures for Transportation, pp. 6-14.

Table 4

Total Capital Investment in Highways⁶
(Millions of Dollars in 1969 Prices)

	Equipment		Structures	
	1960	1970	1960	1970
Autos	93,508	163,151	--	--
Taxicabs	327	347	--	--
Trucks (commercial for hire only)	4,395	9,896	1,490	7,031
Buses (intercity)	469	363	93	130
Highways	1,619	2,875	58,637	107,658

⁶1972 National Transportation Report, U.S. Department of Transportation, Washington, D.C., July, 1972, p. 22.

Table 5

Adjusted Capital Investment for All Modes⁷
(in millions of dollars in 1969 prices)

	1960	1970	% Change
Autos (including taxis)	132,869	235,521	+77
Trucks (commercial for hire only)	13,139	30,257	+130
Buses	815	825	+1
Air Travel (public and private airplanes plus airports and airways)	5,824	18,134	+211
Railroads (intercity)	41,336	41,416	+.2
Pipelines	3,778	4,336	+15
Water (waterways and equipment) --intercity traffic	6,466	7,792	+21
TOTAL	204,227	338,281	+66

⁷Information in the last four categories is taken from the 1972 National Transportation Report.

Table 6

Breakdown of Freight vs. Passenger Service
For All Modes

	1960		1970	
	Freight	Passenger Service	Freight	Passenger Service
Auto	0	100%	0	100%
Truck	100%	0	100%	0
Bus	0	100%	0	100%
Rail ^{8,9}				
estimate 1	92.6%	7.4%	96.3%	3.7%
estimate 2	64.2%	35.8%	82.1%	17.9%
Air ¹⁰	19.0%	81.0%	21.6%	78.4%
Pipeline	100%	0	100%	0
Water	100%	0	100%	0

⁸ With railroads there is some difficulty in separating the amount of capital devoted to passenger travel and that devoted to freight. We provide two estimates, the first of which is based on the fact that in 1970 rail revenues for passenger travel were \$420 million and that revenues for freight traffic were \$10,914 million. This represents a split of 3.7% for passenger service and 96.3% for freight. The first estimate may undervalue the resources committed to passenger traffic. A second estimate is provided which is based upon the breakdown of rail vehicle miles between passengers and freight, which will tend to overestimate the value of resources committed to passenger travel. Together, the two estimates provide a range of significance. (Source of information for both estimates: National Transportation Statistics, Summary, U.S. Dept. of Transportation, USGPO, Washington, D.C., November, 1971.)

⁹ In 1960 rail vehicles carried twice the number of passenger-miles as in 1970; therefore, estimates 1 and 2 for 1960 represent a doubling of total investment in passenger service.

¹⁰With air transportation there is a similar difficulty. All miles of transport are lumped together. However, airlines find that one passenger-mile is roughly equal to 200 lb.-miles, or there are 10 passenger-miles in one ton-mile. In 1970 airlines carried 119,674 million passenger-miles and 3,300 million ton-miles of freight. This can be converted to a ton-mile split of 82.3% for passenger service and 17.7% for freight. In 1960 airlines carried 800 million ton-miles of freight and 34,000 million passenger miles. This yields the breakdown described for 1960.

Table 7

U.S. Travel Statistics
(in billions of miles)

	Passenger-miles of travel		Ton-miles of travel	
	1960	1970	1960	1970 ¹⁴
Auto	988 ¹²	1,514 ¹¹		
Bus (inter-city) ¹³	19	25		
Rail (inter-city) ¹³	22	11	595	771
Air ¹³	34	119	.8	3.3
Truck			120 ¹⁵	203
Pipeline			229	431
Water			220	319

¹¹U.S. Dept. of Transportation, National Transportation Statistics, p. 9.

¹²Only vehicle miles of travel (VMT) were available for 1960; therefore, this figure was computed using the VMT times the average vehicle occupancy in 1970 (1.68). VMT numbers taken from the Statistical Abstract.

¹³Statistical Abstract, p. 547.

¹⁴Ibid.

¹⁵Extrapolated from data for 1958, 1965 and 1970 in National Transportation Statistics.

Table 8

Capital Productivity of Freight and Passenger Modes¹³

	1960		1970	
	Passenger miles per dollar investment	Ton miles per dollar investment	Passenger miles per dollar investment	Ton miles per dollar investment
Auto	7.44	*	6.43	*
Truck	*	9.13	*	6.70
Bus	23.31	*	30.30	*
Rail estimate 1	7.19	15.56	7.18	19.33
estimate 2	1.49	22.42	1.48	22.67
Air	7.45	.72	8.10	.84
Pipeline	*	60.61	*	99.40
Water	*	34.02	*	40.94

¹⁶Computed by dividing product (passenger or freight miles) by the capital investment, using the proportional capital fractions provided in Table 5.

*Not applicable.

Table 9

Labor Productivity of Transportation Modes in 1970¹⁷

	Passenger-miles per man hour	Ton-miles per man hour
Truck ¹⁸		93.7
Bus	294.1	
Air ¹⁹	188.7	18.7
Railroads ²⁰ estimate 1	231.5	625.0
estimate 2	47.8	731.4
Pipelines		11,904.8
Water transportation		1,219.5

¹⁷Information on number of employees obtained from 1972 National Transportation Report, p. 21, computations based on 2,000 hours per employee per year and freight-passenger breakdowns from Table 5.

¹⁸Does not include "private trucks--non-freight" (mileage not available).

¹⁹General aviation and airlines, with percentage split as in capital intensiveness analysis.

²⁰With percentage split as in capital intensiveness analysis.

Table 10

Acres of Land by Mode, 1970²¹

	Thousands of Acres of Land
Highways	25,223
Railroads	3,439
Airports	2,120
Pipelines	992

Table 11

Productivity of Land²²

	Passenger-miles per acre of land	Freight ton-miles per acre of land
Auto	92,545	
Truck		66,735
Bus	220,258	
Air	68,591	6,873
Rail estimate 1	84,641	230,938
estimate 2	17,869	273,073

²¹"Capital Stock Measures for Transportation," U.S. Dept. of Transportation, USGPO, Washington, D.C., Dec. 1974, pp. 3-47, 3-48.

²²Computed using freight-passenger breakdowns from Table 5 and total travel numbers from Table 6.

Table 12

Safety of Various Modes of Travel in 1970²³

	Millions of passenger miles per fatality	Millions of ton miles per fatality
Auto	33	
Truck		274
Bus	3,125	
Air ²⁴	100	10
Rail estimate 1	120	331
estimate 2	25	390
Pipeline		not available
Water		500

²³ Computed using percentage split factors from Table 5 and using fatality data from National Transportation Statistics, p. 11.

²⁴ Mostly occurring in private aviation.

Table 13

Transportation Productivities²⁵

	ENERGY			CAPITAL			LABOR		LAND		SAFETY	
	Pass.-miles per 10,000 BTU	Ton-miles per 10,000 BTU	Passenger-miles per year per dollar invested	Ton-miles per year per dollar invested	Pass.-miles per man-hour	Ton-miles per man-hour	Pass.-miles per acre	Ton-miles per acre	10 ⁶ Pass.-miles per fatality	10 ⁶ Ton-miles per fatality		
	1960	1970	1960	1970	1960	1970	1960	1970	1960	1970		
Auto	1.8	1.1		7.44	6.43				84,601		33	
Truck (for hire)												
Bus	6.7	6.3		23.31	30.30		294.1		396,463		3,125	
Air	1.4	1.2	0.3	7.45	8.10	0.72	188.7		68,591	6,873	100	10
Rail Estimate 1	3.4	3.4	16.7	7.19	7.18	15.56	231.5	625.0	84,641	230,938	120	331
Estimate 2	3.4	3.4	16.7	1.49	1.48	22.42	47.8	731.4	17,869	273,073	25	390
Pipeline			100	52.6		60.61	99.40	11,904				
Water			16.1	14.7		34.02	40.94	1,219				500

²⁵Compiled from Tables 1 through 12. A blank space indicates either unavailable information or irrelevant category.

Senator BENTSEN. The chairman of the full committee is here, who I know has another responsibility on a markup on a bill in another committee. I would like to defer my line of questioning to him at this time.

Senator RANDOLPH. Thank you, Mr. Chairman. I am appreciative of your understanding of my responsibility to the other committee and the markup which is proceeding on important legislation.

It is difficult for me to address Mr. Boyd as President Boyd. I remember him, of course, as Secretary Boyd; but it is gratifying to see him here discussing a subject in which I think he has a knowledgeable interest and a background which helps us very much as you, Mr. Chairman, and members of the Subcommittee on Transportation consider the items by which we continue the mobility of our Nation, not only for passengers, but for the movement, of the agricultural products of the Nation.

Mr. Turner believes that the Highway Trust Fund does indeed levy costs of the highway program against the highway system's users on a scale commensurate with each individual's use of the system. Now, if we look at it another way, you state, President Boyd, that ownership of motor vehicles is so widespread and the taxes supporting the trust fund are a general tax on the population. I am wondering what your response would be to what we have heard from Mr. Turner?

Mr. BOYD. Well, Frank and I have an argument which is not new by any means. The point that I tried to make in my testimony, with which I don't believe he takes any issue, is that the development of the highway system, particularly the urban system, has taken substantial land off the local tax rolls which has not been compensated for in any way by highway funds. It had diminished our housing supply in this country which has certainly been a detriment, in my judgment.

There is no place, so far as I know, except on toll roads, where the cost of providing police and traffic services are paid out of the Highway Trust Fund, and there is a distinct cost, I believe, of pollution, air pollution, a large portion of which has been attributed to the motor vehicle. I believe there is agreement here that cost in no way has been paid out of the Highway Trust Fund, so far as I can find out.

So I don't know that Frank and I differ on this except in terms of definition as to what is the cost of the highway system and I certainly don't want to put words in Frank's mouth, but my guess is that he defines the cost of the highway system as the construction and maintenance of the system. I say that you cannot isolate to that degree. You have to look—if you are talking system, you have to look at the total system involved.

Senator RANDOLPH. You are emphasizing in your view it is the supporting of a general tax on a total population. Is that correct?

Mr. BOYD. Yes, sir. The costs I have outlined are certainly costs paid by the total society.

Senator RANDOLPH. Well, Frank, I know that in your recommendations, you have suggested extension of the Highway Trust Fund for improvements to the highways only. In the body of your testimony today, you name many categorical programs, currently funded out of the trust fund other than just our interstate system.

Now, can we assume that you favor the continued financing of categorical programs from the trust fund and should these categories be basically the ones existing now or just a selected few? Would you state your feeling on that?

Mr. TURNER. Yes; Senator Randolph. I believe the Highway Trust Fund should be extended indefinitely in approximately its present format for essentially the same purposes that it is now utilized. I would agree with the general principle that the large number of individual categories included in the highway program authorization legislation should be reduced. I don't believe they should be reduced to as few as the administration bill proposed.

I believe that is getting them back down into such generalized categories that the category itself almost loses its meaning and its application. Somewhere in between the 38 that are claimed as the present number of categories and four that the Administration proposes, I think there is a good compromise.

Basically, I think the Highway Trust Fund should be used exclusively for the financing of those categories, whatever in number they might be, that eventually come out of the legislation. I do not believe that the Highway Trust Fund should be saddled with costs of other forms of transportation. The Highway Trust Fund is a highway trust fund. It is not a transportation trust fund.

The taxes going into the Highway Trust Fund were levied on the highway users only. They were levied on them in amounts that were representative of the relative shares of costs which were properly assignable to the individual users and related to the amount of use which the individual user made of a system based upon very elaborate, exhaustive, time-consuming studies that were made at the direction of Congress in the 1956 act, finally reported to the Congress in 1961, and forms the basis for the present statutorily levied tax rates that go into the Highway Trust Fund. That report that I refer to is generally referred to as the so-called section 210 report because 210 was the number of the section in the 1956 Highway Revenue Act which directed that the highway departments and Bureau of Public Roads undertake that study.

Now, with respect to comments that Mr. Boyd has made, I agree that housing, the removal of houses from the rights-of-way in the highway programs in the initial stages is a very undesirable thing. We recognized it as such and that is precisely the reason we undertook to cure that problem.

After a great deal of study and a great deal of debate, there was included in the 1968 Highway Act for the first time, legislation which authorized us to make substantial payments for people and businesses, including renters, who were displaced by the highway program. Not only do we pay the fair market value of the properties that were taken for highways, but we also can pay premiums over and above market prices, up to \$15,000 for an individual property, \$10,000 for a business, and \$4,000 for a renter displaced from a rental house or apartment, when necessary to relocate him to comparable housing.

Subsequently, that legislation has been made governmentwide and made applicable to every Federal-aid program in the Government. I

think that it was a landmark piece of legislation and a forward step which largely was pioneered by the highway program. I consider that a benefit and not a loss.

Studies that have been made of displaced persons from the highway program have indicated that under the present program, under that legislation I just referred to, those people who have been forced out of their houses by the highway program have been very substantially benefited by being relocated. Go back and interview those people and they state while it was painful at the time, after they had become settled in their new places, they have better housing than they had before.

The net effect is that the highway program has increased the level of our housing in this country. Under the statute and regulations at the present time, no person can be displaced from a right-of-way taken for a highway project unless and until satisfactory replacement housing has been provided. Therefore, there is always a one-for-one replacement of housing.

Now, what Mr. Boyd was referring to was the early days of the highway program. That probably has been cured. It is no longer with us.

As far as police costs that Mr. Boyd refers to, within the States, a large share of the highway user tax payments levied at the State level are used to pay for police action. The cost of policing very largely is paid for by the court fines levied from traffic violations in urban areas.

Mr. Boyd has referred to the social costs of air pollution as not being paid out of the Highway Trust Fund. I don't know how you quantify those and if somebody can find a way to quantify those so-called social costs, then I think we can find a way to assess them against the user. But until and unless we can do that, it seems to me it is unfair to make charges for unknown, unquantifiable items, in an attempt to assess those against users and out of the Highway Trust Fund.

We are going to assess substantial charges against the individual user out of his private pocket through the changes that are required in engine design and manufacture of the automobile, in order to meet the statutorily enacted air pollution control levels that have been set by this very committee. The individual is going to pay for those so-called social costs at this point not out of the Highway Trust Fund, but directly out of his pocket before it gets into the Highway Trust Fund.

I would maintain my position that the highway user does pay for the costs of his programs and the transportation he gets out of it.

Senator RANDOLPH. Mr. Turner, I know that in your statement, you have indicated that the majority of the deficiencies in our highway system are on the rural roads, the rural roads of Texas or New Mexico or West Virginia.

It has been estimated, as I have read many times, that deficiency, if it was to be taken care of at the present costs would amount to about \$400 billion. Is that correct?

Mr. TURNER. At least that amount, Senator.

Senator RANDOLPH. That is beyond Federal capability, isn't it?

Mr. TURNER. That is correct. It is intended, however, to cover all levels of funding, Federal, State, city, county, toll roads, et cetera.

Senator RANDOLPH. What would be, then, your realistic view as you talk with us today, of the annual dollar figure that might be used for rural deficiency upgrading?

Mr. TURNER. Levels of about half that amount at a rate which approximates the rates of investment in highways, currently, which are close to \$20 billion a year by all agencies and levels of government, Federal, State, city, toll roads and other agencies.

Senator RANDOLPH. Mr. Commoner, you and Mr. Turner might comment on what President Boyd suggests. He suggests the Maritime Administration be placed within the Department of Transportation, and Navigable Waterways.

Also, could you give us a quick answer as to whether you would support a user tax that could be levied to those types of transport, that use the waterways?

Mr. COMMONER. I don't have any specific comments on that. I am looking for an opportunity to disagree with Mr. Turner, though, as soon as you give that to me. I think some of the statements he made are simply incorrect.

Senator RANDOLPH. Incorrect?

Mr. COMMONER. Yes.

Senator RANDOLPH. I see. Frank?

Mr. TURNER. With respect to the inland waterways?

Senator RANDOLPH. Yes.

Mr. TURNER. I think they should be assessed a charge of some kind. I don't know what the amount should be. I am not capable, because of my lack of background knowledge on waterways, to say what that should be. Certainly, the principle that the user pays for the cost of the system should be established in all forms of transportation and in all other public works of Federal and State governments, in my opinion.

Senator RANDOLPH. Mr. Chairman, I am appreciative of the privilege you gave me to explore some areas with these questions, and the rather complete answers that have been given. Perhaps this question would be in a sense for all of us, and this will conclude my questioning.

I don't think it is a question of either/or one form of transportation. I think we have to have a Federal investment in transportation in the country. What is the extent to which the Federal Government can or should participate, be it highway, rail, water, or air transportation?

Mr. Chairman, if you would permit any or all of them to answer this. Perhaps it could be helpful to us.

Again, I thank you, very much.

Senator BENTSEN. Thank you, very much.

Mr. COMMONER. Let me make some comments on the extent of Federal investment in the highways. It is relevant to a number of things Mr. Turner said. He has pointed out highways represent the major mode of transportation and, therefore, we ought to pay maximum attention to them. I think that argument is standing the facts on their head.

The fact is; yes, the highways represent major transportation facilities now. But the entire transportation system is in deep trouble. Therefore, we ought to consider what is wrong with our present attention to highways. In other words, it is precisely because we are using highways so heavily, I think, that we are in trouble.

For example, it is largely responsible for the deficit in domestic energy production. It is the highway system that burns a good deal of our fuel and, as I pointed out, it burns it with the least output in passenger-miles or ton-miles compared to other modes of transportation. In other words, the highways are in good part responsible for the energy crisis.

The highways are also consuming enormous amounts of capital relative to the yield they give us. So the devotion to the highway system is contributing to the capital shortage. Mr. Turner says that the reason why we have highways and highway modes of transport is because that is what people want. Well, let me challenge that.

There is an interesting statistic, a study done of urban transportation, which shows that in several urban areas, black people travel 20 percent longer than white people between the place where they live and the place where they work. Is that because black people are more interested in traveling in their cars? No. The reason is they have a more difficult time finding a place to live and a place to work and as a result, the distance between the two places increases.

In St. Louis, I can assure you that because of the decaying of the city and the urban sprawl, people travel between where they live and where they work much longer—sitting in cars, breathing fumes—not because they want to, but because they have no choice. In other words, what I am saying is that the story is exactly the other way around.

Yes; it is true people like to take off on the weekend and get in the car and go fishing. But that is a very small part of the use of the highways. Most of the private car use is to go to and from work, to and from the store, to and from the doctor. It is the way in which our places of work and residences are distributed that contributes to the heavy use of cars. I think most people would rather walk to the store than get in the car and have to haul things around.

SENATOR BENTSEN. Dr. Commoner, we look at all kinds of public opinion polls that are for mass transit. I have worked hard for transit, for mass transit, but when we finally get to it, we find most of the people want mass transit for the other people so they can go down the freeway and have the freedom and options and convenience. It is pretty hard to argue there are not a lot of conveniences insofar as time scheduling and being in your private cocoon, traveling along there.

I get out and ride the BART system. I think it is magnificent, beautiful, and fast. They are having trouble generating the traffic it should have on it to really make that thing effective though, cost-effective. How do you explain that?

MR. COMMONER. By the fact we have not paid enough attention to improving the convenience and speed of public transportation.

SENATOR BENTSEN. The BART system is an enormous investment of the taxpayer's money for that percentage of people who are utilizing it. I think it is absolutely beautiful and fast. It is quiet. It is one of the most modern systems in the world today.

MR. COMMONER. Except it doesn't work very well.

SENATOR BENTSEN. It works quite well. The percentage of failure is very small. They have had no fatalities on it at all. The number of breakdowns has been minimal. It has really done quite well.

The attention of the press has been on the failures of it. You compare it to the New York subway system, for example, to the noise and lack of speed and the unsightliness and all that sort of thing.

Let me ask you another question. You talk about the railroads and I read this article in Harper's that you have written. Then in your testimony, you talk about facing up to the point, the politically difficult question or the fundamentally difficult question is the Nation ready to give up the failed attempt to organize public transportation?

Should the integrated system that maximizes increased productivity, even if part or all of this system should be publicly owned, are you asking for the nationalization of the railroads?

Mr. COMMONER. Speaking as one voter; yes. Let me point out I assume I am here in my role as a scientist, a professional, and I have a particular philosophy about the political role of the scientist which is that the scientist's responsibility is not to advocate solutions, which are not purely scientific matters. In other words, I can lay before you the advantages and disadvantages of various modes of transportation, but the choice is a value judgment. It is a political judgment. I don't think my political opinion is worth more than anybody else's. The question of nationalization is a political judgment.

What I can say professionally is that in my opinion, if we don't nationalize the railroads, they will go to pieces and if they go to pieces, the country's ability to use its resources for the welfare of its people will deteriorate sharply. We have a choice between serving the needs of the people and making the decision about nationalizing the railroads. My own view is that I would rather nationalize the railroads than not. But as I say, I speak there as one citizen among many.

Senator BENTSEN. Dr. Boyd, as president of a railroad, would you respond to that?

Mr. BOYD. Yes. I have a somewhat different view—

Senator BENTSEN. Secretary Boyd.

Mr. BOYD. I am not as philosophically—the suggestion made by Dr. Commoner does not upset me, if that is the will of the public. However, it seems to me that the question—opposing the issue as to nationalization or not, really tends to beg the question which is, as I see it in context, whether or not the railroads have something to offer in the public benefit, because at least in theory, insofar as I know, most of the time the Congress legislates only in the public benefit.

One of the problems of the railroad industry has been that it has been, in years past, providing social services such as the nationalized railroads have been doing at the expense of the owners of the railroad. If one wants to look for a fundamental reason why the Penn Central went into bankruptcy, it is because of passenger losses.

This cannot be in a context of private enterprise. However, if there are public policies to be served by a healthy railroad industry, then it seems to me it could be handled by subsidies just as easily as by nationalization.

I do believe that the quest for efficiency which comes through private enterprise probably has advantages over a nationalized operation, even though I should say that it disturbs me to hear some of my colleagues talk about how bad the railroads are in other countries and compare the southern rail system in the United States with the British rail

system and talk about how many millions of dollars of losses there are in the British rail, as if those people don't know how to run railroads.

They know how to run them as well as we do, and they are ahead of us in some areas. It is a classic case of comparing apples and oranges. The British rail is serving what the British Government feels to be in the British public's interest. It is providing a lot of employment for a lot of people. Gatekeepers go out once a day and lower a gate and a country train comes through and they raise the gate, and they have done a day's work. This is a substitute for welfare.

I think we can do a better job through subsidies, and subsidies to the public, not to the railroads. The railroads are a conduit, if you get to that stage. I think that is the case for subsidy for aviation. I don't know whether McAllen, Tex., for example, could support scheduled airline service or not, on its own.

Senator BENTSEN. Very well, I might say. That is one of the most profitable segments of Texas International.

Mr. BOYD. There are places that could not do it on their own. When I was at the CAB, we figured the average subsidy was \$17 per passenger. We would authorize routes and subsidize pretty much on that basis. That was a subsidy to the community, it seemed to me.

I think what we are talking about here is providing certain public services which, if they cannot be provided economically in an environment of public policy which permits the railroads to operate profitably, ought to be paid for by the public for the public benefit.

I don't think nationalization needs to enter into the issue, except in cases such as in the Northeast where I think the nationalization is a great likelihood because the public has not been willing to face the issues, as Dr. Commoner was saying.

We are making decisions by backing into them—public policy decisions. Unless something is done over the long term, the whole railroad industry is going to be sold for scrap or it may most likely be nationalized because the public is unwilling to face up to the issue. I think it is a tragedy. I don't think nationalization is necessary, but I do think railroads are.

Mr. TURNER. Mr. Chairman, I don't want to express a view on nationalization or not nationalization. That is out of my field. It is purely a political question at this point. I think the important issue is that we should attempt to use all modes of transportation in their most effective way. If we do that, we would help solve some of the problems that we are concerned with—with rails. We could help solve some of the problems in the other fields at the same time.

If we go back to that principle that there are certain things that the rails can do better than the highways, better than trucks, and that there are certain things that the trucks and highways can do better than rails, then the rail system can do a much better job on long-distance line haul movements. It cannot do a thing however, in the area of collecting and distributing freight to and from the railroad stations and terminals.

I feel the highway is essential to the operation of a rail transportation line. Perhaps we should give consideration to combining the advantages of each of the two into a total system. We have been doing that to some extent, but not nearly as much as we should.

For the line haul, we should utilize a great deal more of the so-called piggyback types of operations, where we put truck, semitrailer units on the railcars for the long haul. In those cases, the rails can move the traffic at a lower cost per ton mile, at a lesser consumption of petroleum or any other kind of fuel. But the rails cannot move that cargo to and from the rail station.

It is that part that we are not including in some of the comparisons that Dr. Commoner made a while ago when we were talking about moving freight.

Senator BENTSEN. I agree on that point. To just say capital productivity is based merely on tons moved, you get into a lot of other questions that have to be brought in as to questions of value of merchandise moved, convenience, and speed. A lot of other elements are involved in trying to determine that productivity of capital, rather than just the tons on the chart that I looked at there. I fully understand that.

What we are working toward is a correlation. Let me get to another point, if I may, Mr. Turner. I have one item I disagree with Secretary Boyd. That is the one on the question of the loss of tax revenues because of properties that are taken over by the interstate.

I look at too many real estate charts and listen to too many real estate salesmen about what happens to the value of properties at the intersections on interstates and on the sides of the streets. You say on the one side, you take the property off the tax rolls and lose the taxes. On the other side, you raise the value of the properties and you recoup the value.

Mr. BOYD. There is no inconsistency there.

Senator BENTSEN. I think there is in arguing we have lost taxes and then on the other side under the present system find an incredible increase of values of properties along there for which taxes are raised. I am sure it much more than compensates for the tax loss.

Mr. BOYD. Can I explain?

Senator BENTSEN. Yes.

Mr. BOYD. All right, sir. Let me take an example. I happen to know something about Jackson, Miss.

Jackson, Miss., has an interstate system which comes down through the edge of town. It took out a lot of houses and property off the tax rolls. It has taken property off the tax rolls of the city of Jackson, Miss. It has created interchanges in Hinds County, in the unincorporated area.

Hinds County certainly has benefited. The city of Jackson, the downtown business center of Jackson, is not a very happy place these days. I don't attribute it all to the interstate by any means.

My point is simply this: You lose taxes—I was talking relative to the local community. You may be able to find an example of where you get a sufficiently widespread area within the political subdivision, so that you have an offset of loss versus benefit, but in so many areas what has happened is that the property has gone off the tax rolls within the city limits, and the property values have been enhanced in the county.

That doesn't help the city. That is what I am saying. I don't think there is any conflict in my statement.

Mr. COMMONER. May I just make a point there?

Senator BENTSEN. I would argue, Mr. Secretary, that in most instances that I have seen, I have seen a very major increase in property values that far overcome what they lost off the tax rolls on that particular point.

Mr. COMMONER. You have to think of it in an integrated way. Mr. Turner made the point that the law requires compensation for people displaced by the right-of-way.

Well, that is a very small part of the damage done to a city by a right-of-way.

Senator BENTSEN. I would not argue with you on that. Let me interrupt you on one point here, because Senator Domenici again has another committee to go to. He would like to make an observation.

Senator DOMENICI. Thank you, Mr. Chairman. I did not get to hear all of Mr. Turner's statement, but as I understand it, you make the point that personal mobility is as much a national goal as many other national goals that we have set.

Now, I want to start by saying I could not agree more with that concept. On the other hand, just the observation of one Senator, I think, trying to do his job, serving on a subcommittee on transportation, I don't think there is any subject other than energy, which I am not going to bore you with the facts on, other than to tell you that on that subject in the last 8 months, we have had 1,000 bills introduced in the Congress. They have been referred to 14 standing committees of the Senate; one piece of legislation was referred to nine standing committees.

When we shake all that out after 8 months, we have produced two energy bills, both innocuous. Now, the point I am making is that second to that fiasco is the transportation jurisdictional dispute.

I am delighted to come here and listen to problems of railroads and listen to the observations about various modes and mixing them together in a broad national policy.

It does appear to me that so long as the Congress has public works invested with one little pinch of it, we run to the floor to hear a bill on railroads which are about to go broke, and we hear it is related to the highway department, and we don't have anything to do with it, and then we hear the cities complaining about mass transit.

You would think that would be part of what we ought to be doing since we are building highways in cities. So while I wholeheartedly agree with the concept that to the extent that this country can afford, personal mobility should be one of the goals.

I could sit here and argue where I have seen countries where it was not available, and I would almost say personal mobility is an ingredient of freedom in this country, and it has some mammoth social benefits you can hardly measure.

I am going to agree with you to the extent if we don't do something about evaluating it and integrating it and relating them together, we are going to deny ourselves personal mobility by strangulation.

We are going to end up doing absurd things about personal mobility, rather than let our great scientific, technological genius in the private and public sectors work together on it.

We are going to do some crazy things to deny personal mobility because we refuse to recognize the interrelationship of them.

In summary, I guess I am hoping that some U.S. Senator on each of the three or four committees would end up concluding that maybe for a year or two we ought to have one major committee look at transportation legislation, even if they did not want to have jurisdiction to introduce the laws.

But just once and for all we should coordinate it so that Mr. Boyd's problem of a \$9-billion maintenance deficit for the railroads of this country should be relevant to another committee that is talking about how many billions we ought to spend for transportation.

I have heard testimony to this effect repeatedly in the Budget Committee and elsewhere, yet I don't know who is addressing the issue. I have no input. I will probably go to the floor and find that the way we are going to solve it is with a antirecession program to build railroad beds with \$500 million or \$600 million programs, to help the railroads and help unemployment.

This is no way to solve the transportation problems of the country. I do hope those who are as concerned as I about personal mobility, the Highway Trust Fund, and auto mobility, will understand that if we don't adopt an overall perspective in terms of looking at the larger problems, the resources available and the goals, it is going to do little good to continue to hold out firmly for jurisdictional lines and the sanity of this, that, or the other.

We are going to end up with the demise of something we all want to protect.

I don't expect anyone to comment on it. I just want to put that in the record. I don't know what I can do about it. Perhaps we will propose something on it just so that my views will be known.

Mr. Chairman, I thank you for the time. I have tried to attend most of the hearings, but today I must leave.

Senator BENTSEN. You have been very attendant, Senator. You know how strongly I agree with you that we ought to consolidate all transportation under one committee. I don't really care whether it is this one or someone else's.

It ought to be put together in one committee in the Senate. I concur with you, Mr. Secretary, that they ought to do it on the executive side too. They made a little more headway than we have. They have been making some headway in the House, and we have now commissioned a study in the Senate to do some realignment of responsibilities of our committee here, so we don't have so much overlapping and competition in jurisdiction. I could not agree with you more on that.

Senator DOMENICI. Thank you for your comments.

Mr. Boyd. Mr. Chairman, we run the risk of getting ourselves in a box by more or less assuming that personal mobility is solely related to the automobile.

I think we have developed the sort of feeling in this country that the way we have personal mobility is through the automobile. I think the highway system has certainly provided that more than anything else in the world.

But that doesn't have to be the case. What does have to be the case is that the Congress in its wisdom says, "Here are the things that are available in a total transportation system."

I think all of us, no matter where we sit at this table, feel that a total transportation system has to be sufficient to meet all of the legitimate needs of the American public. And mobility can be provided any number of ways.

It doesn't have to be by building more highways.

Senator DOMENICI. I would counter that by saying I don't disagree, but I also think that for those who try to evaluate the costs and the social impediments of personal mobility, that they too are putting that within the constraints of present auto mobility.

I don't think that is the extent of American technological genius either. They also say it is a great petroleum guzzler. That is not necessarily the niche you should put American mobility in for the next 30 years from now.

If it is important enough, what are other ways to provide it and still have personal mobility? That is what we should talk about.

Mr. BOYD. There are three of us here who have strong feelings about this. And we are all totally sincere. We can develop definitions and objections and criteria to the end of the world, and it doesn't mean a thing.

The important thing is that you gentlemen who make up this Congress have got to say what do you want for the public out of transportation? And set some criteria and some goals.

Until you do that, we are just going to be floundering around here with some of us getting in worse and worse messes all the time, which we will attribute to you in terms of public policy.

Senator DOMENICI. And which we probably—you are probably justified in attributing it to us.

Senator BENTSEN. In part, in part. There is enough blame to go around.

Senator DOMENICI. Let me ask one question. You talk about nationalizing or not nationalizing the railroad. Mr. Boyd, again I am violating my own precept here. I don't think we are going to have much impact on what happens out of this committee.

I guess I am using today to educate me on what I am probably going to get in front of me down the line on the Senate floor out of another committee.

Is it an all or nothing proposition? Is there a merit in equating railroad beds to the highways? There is some kind of similarity in that respect? Then compare the operation and maintenance of that which goes on in the system to the operation and maintenance of the trucking companies or individual automobile mobility.

I understand from what I read there is some discussion of maybe having the railroad beds be nationalized, but not the operation and maintenance of railroad systems thereon.

Mr. BOYD. That is an alternative which I don't think is nice. It is an alternative. There is serious question within the industry as to whether or not the railroad industry as we know it today, or in any practical fashion, can operate as a private entity on a nationalized roadbed.

There are any number of approaches to this problem. I don't think we will ever have to get to this.

Senator DOMENICI. Thank you very much. Thank you, Mr. Chairman.

Senator BENTSEN. Let me ask you gentlemen a question of policy. Any one of you might want to respond to it. The administration is proposing more turning back of authority and Federal moneys to the local jurisdictions, be it city or be it State. Do you think that is conducive to the development of the national transportation policy?

Mr. TURNER. I will start on that. I believe that the mix that we have now in the process is reasonably good. I don't believe it is desirable to turn back the total development and control of policy, particularly policy that is related to national interests, to a local unit of government.

In the highway program, we have the principle well established that the State is the principal owner, operator, and recipient of Federal-aid to highway funds. We work out a partnership arrangement between the Federal Government and the State Highway Department in the development of the Highway Transportation System within that State.

The State, in turn, works with the local units of government, cities and counties, in connection with similar kinds of programs, or the part of the Federal program that it concerns itself with.

I do not believe that the cities and counties as local units of government in this country are ready and that they really want the major responsibility in decisionmaking with respect to parts of the transportation program that involve national interests.

I don't believe that we should make very much change in the basic system, the sharing of that responsibility, than we have today. I think it has worked very satisfactorily.

Senator BENTSEN. Is there a feeling to the contrary?

Mr. COMMONER. Yes. I think the approach to this has to be along the lines of integrating the transportation system. Let me take a specific example: One of the reasons why automobiles are used for intercity travel is that when you get to the city, there isn't decent urban transportation so you have to have your car in order to move around.

It seems to me if there were an overall national policy, which I certainly favor, of cutting back on the emphasis of the highways in favor of railroads for interstate travel, then one would recognize that there is a comparable need for good, convenient, urban transport, in order to make the railroad intercity travel convenient for the passengers when they arrive in the city.

Now, under those circumstances, it would make sense, it seems to me, for the Federal Government to turn around to the cities and say, "Here are funds which we want you to use to improve the convenience and speed of urban transport, particularly in relationship to the revitalized intercity rail transport that we will provide."

In other words, I think the primary thing is what your committee is interested in, an integrated transport system. The funds should then be apportioned in ways that bring about the creation of the parts, in coherence with the whole.

In some cases it ought to go to cities; in other cases, it ought to remain Federal. I rather doubt the States are an appropriate area in those cases.

Mr. BOYD. I think it is essentially a matter of definition. Senator. We have in effect three national transportation systems. We have a highway system that is national in character. We have a railroad

system national in character. We have an airway system national in character.

But each of these has elements which are strictly local in their impact, and the question is, how do you define what is national and what is local? My own feeling, as I stated in my testimony, is to the extent we are talking about local transportation, I would favor eliminating categorical grants and saying to the community, and here again I say the community of interest which in my particular case happens to be the greater Chicago metropolitan area, which covers five counties in Illinois and two in Indiana, so it doesn't fit within any particular subdivision politically.

There, we get into the whole question of regional planning which I will not bore you with.

Moneys for transportation within that area ought to be handled by the local people. I think it is wrong for the Federal Government to decide, "We know best what the character of your community is." I think it is dead wrong, and if the people in that Chicago area, or in Jacksonville, Fla., or Atlanta, or Boston, want to mess up their own community, they ought to do it. The Federal Government ought not to be playing God.

We ought to have standards for national transportation systems and either fund those directly at the national level, or earmark those funds, but for the local part, leave it to the communities.

Senator BENTSEN. I would be sympathetic, I think, to that sort of a demarcation.

Mr. Turner, you talked about \$400 billion in needs by 1990. When you look at a figure like that, that must be taking needs to the ultimate I would think. We have got the same problem in health, the same problem in education, the same problem in mass transit.

There is no way we can take care of all of these ultimate needs to the point that was made but such a figure. We have got the problem of trying to balance these things out to the degree we can.

I get somewhat staggered by these figures that are staggered at us in this committee, and the other committees I am on. You are talking about car pools and van pools and being amongst the most efficient forms of transportation. I guess I would agree with you if people would use them, but I have not seen much success in them.

I talked to one president of a very major corporation who said he spent \$150,000 of his company's money computerizing the employees' residences to try to get them in car pools so they would know who lived near them, and their hours of work, and that sort of thing.

When he got all through spending money, he had almost zero reaction from his employees. It is a very major company.

Now, how do you argue the success of these? If people would do it, I could understand it. But I have not seen where they really do it.

Mr. TURNER. You are quite correct if it is done purely on a voluntary basis. The way that it has worked successfully is where there has been some extra nudge of one kind or another which provides a direct benefit to the carpool participants.

The most successful one of those is the one run by the MMM Co. in St. Paul, where they have about 700 of their 9,500 employees in that area involved in van pooling.

The company is highly satisfied with it, because it has substantially reduced the number of parking spaces on the plant's ground that they had to provide, releasing that land for plant construction and development, to increase the manufacturing capacity of the company.

The employees are standing in line to join the system as additional vans are added to the fleet. They have about 70 at the present time, and they are enlarging it.

The company does not subsidize the system in any way. It is paid for entirely by the users. The amounts that each of them has to pay for the use of the system is much less than the cost of public transportation, or their own private transportation.

In most cases each one of those participants had previously been an individual car driver, or using a very low occupant carpool.

That one worked quite successfully because management took hold of it, promoted it, and there is satisfaction on both sides.

The kind of an action which you referred to, where your friend had unsuccessful results, I think is typical of what will happen unless there is a real push, unless there is some provision by management that produces an incentive for employees to participate.

One of the incentives in the MMM system is that the company provides indoor, close-in parking. That is kind of an incentive in St. Paul, when it is 30 below zero in January. The employees can park inside in a heated building out of the snow, and in the building in which they work.

I believe to make the thing work in most cases we are going to have to put a little bit of a nudge to it, which probably involves controlling and assigning the downtown parking space in the central cities, or at major traffic generators, plants, and other places of employment, such as the MMM company has done.

That problem is not going to be any more difficult to get people to accept, however, than to get them to accept the ridership of our public transit systems that we are building. They got away from them because transit doesn't supply them with the kind of transportation service that they desire. They will not go back to them unless transit provides something that they need and want.

I don't believe the transit systems as we now build them and operate them will do that. The carpool systems will do that if you couple them with some controls which I think have got to be in the parking assignment area.

But take the example of the Federal Government here in Washington; if it would do that with its employees, you would find that congestion on the street systems in this area would drop about 50 percent immediately. In so doing, you would free up the system where it would be easy moving for everybody.

MR. COMMONER. Mr. Bentsen, let me add to that. Our center has done a study on the Minneapolis van pooling and its implications for the country. One of the reasons for the success there is not only the company, MMM, and several others, but also the State Highway Department.

The State Highway Department did a very careful analysis of the routing to different outlying parts of St. Paul-Minneapolis. They developed a very good computer program, allowing the company to locate people geographically from their street address, and so on.

Now, one of the things that I think would help van pooling a great deal would be if the Federal Government undertook to provide that kind of service, perhaps cooperating with different States, so that companies would know that they had access to that kind of information.

I think that is a very important part of it.

The other side of it is that this could have a very big impact on a number of national problems, including air pollution.

We computed that if a quarter of the employees who could van pool—and that means you have about 250 employees in each establishment—were involved nationally, it would alleviate situations where the EPA has said that smog is exceeding their acceptable levels. While we do not know what the total cost of this smog is, the actual emissions are known. But I can tell you, referring to something you said before, air pollution costs the average American at least \$60 a year per capita in doctor bills, laundry bills, and so on.

A lot of those things would be alleviated in urban areas by van pooling. I think it is promising as a short-term solution over the next 4 or 5 years. But as a long-term solution, it seems to me we have to go to mass transit and the railways.

Senator BENTSEN. I appreciate those comments on it. The people I talked to had not been successful. I am going to take a look at this.

Mr. TURNER. Mr. Chairman, could I indicate to Dr. Commoner that his suggestion that the Federal Government should provide the funding with which to assist companies to make those computerized listings and match ups is being done by the Federal Government at the present time under statutory authorization provided in the 1973 act.

Senator BENTSEN. Gentlemen, we have had some very independent views here, some provocative suggestions, I think. They have been helpful to us. I am very appreciative of your attendance. We will take your entire statements into the record.

At this point I will include the statements from the American Society of Civil Engineers and Kenneth M. Good, president, Good Financial Corp. in the record.

[The statements referred to follow:]



AMERICAN SOCIETY OF CIVIL ENGINEERS
NATIONAL TRANSPORTATION POLICY COMMITTEE

James O. Granum, P. E.
1776 Mass. Ave., N. W.
Washington, D. C. 20036

July 22, 1975

The Honorable Lloyd Bentsen, Chairman
Subcommittee on Transportation
Senate Public Works Committee
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

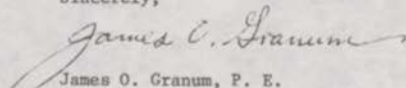
In connection with your panels and hearings on transportation, it is our understanding that you will accept statements for the record. Accordingly, it is requested that the enclosed "Principles of National Transportation Policy" be included in the hearing record on NATIONAL TRANSPORTATION POLICY scheduled for July 30, 1975.

This Position Paper was adopted by the Board of Direction of the American Society of Civil Engineers on April 12, 1975, following some two years of consideration and input from all segments of the Society, which consists of approximately 69,000 civil engineers throughout the United States and foreign countries, many of whom have distinguished careers in planning, design, construction, and maintenance of all forms of transportation facilities.

We believe that a strong Federally-aided transportation program is essential to the welfare of the nation, and believe that any such continuing program which is within the scope of the "Principles" outlined herein will achieve the essential goals.

Thank you for the privilege of bringing this statement to your attention.

Sincerely,


James O. Granum, P. E.

JOG:ac
Enclosure

American Society of Civil Engineers

Principles of Transportation Policy

A Position Paper adopted by the Board of Direction April 12, 1975

(amending statements adopted May 1963 and May 1967)

Transportation is a very important part of the life support system. To assure a favorable quality of life, social and economic well-being, health and national security, to protect and enhance environment, and to advance international reciprocation, adequate coordinated systems of transportation must be provided, and function efficiently. Required are safety, convenience, speed, and economy in the movement of people, goods, material resources and services.

Transportation has profound significance beyond the functional aspects of the services provided. It has major influence on land use and conservation; on the development of urban, suburban, and rural residential, commercial, industrial and recreational areas.

In doing so, transportation has social and economic consequences far beyond the areas and people served directly. In recognizing this extended influence, a continuing assessment of available and emerging technologies is required.

Transportation Policy and National Goals

Transportation goals should support national goals. Transportation policies should be based on such long-range goals, and should be responsive to priorities established for national development and the effective utilization and conservation of resources. Such policies are needed to guide the development of transportation objectives and programs. Transportation policies should serve societal goals, but need not be the sole or chief means of their attainment.

Policies should reflect consensus among citizens, professionals, business and industry, expressed through governments at all levels. To achieve such consensus, basic principles need to be established as the foundation, relatively firm over a period of time, on which policies can be established. Policies, in turn, are subject to change from time to time, as conditions and national interests may dictate.

Basic Principles of Transportation Policy

Basic principles following should guide the development of policy dealing with transportation:

1. Elements of decision making

Each proposed action, or inaction, involving transportation should include assessment of total benefits and costs - the full consequences. Decisions should be based on the consequences and consistency with national, regional or local goals, significance to the quality of life, impacts upon the environment and natural resources, technical and financial feasibility, and effects on related transportation modes and intergovernmental relationships. After consideration of those and other factors, professionals have a responsibility to make recommendations for the best course of action selected from among all feasible alternatives.

2. Transportation planning integral with comprehensive planning

Transportation planning should be carried out within the framework of comprehensive planning appropriate to the area of concern. In addition to its service for the mobility of people and goods, transportation is a land use. Transportation facilities should be planned, provided and managed so as to enhance the human, physical, and natural environment as well as the characteristics of neighborhoods, communities and regions. For this reason, planning for transportation must assure involvement and advice of the affected citizens.

Transportation affects - either beneficially or adversely - most people; the use of land; the development and growth of communities; safety; economic well-being; health as affected by air quality, noise and vibration; and the expenditure of energy and other natural resources. These effects vary with the nature, scope, costs, and intensity of transport service.

Transportation facilities, in turn, are affected by market choices, the location of developed communities with their established land-use patterns, wealth and traditions, and characteristics of geography, such as rivers, lakes and mountains. Full consideration should be given to all these interrelationships in transportation planning and in the implementation of the transportation plan.

The planning process must include consideration of all feasible alternatives, sometimes including doing nothing. The objective is to determine optimal solutions that will provide facilities adequate to the demands to be placed upon the system.

3. Integrated transportation systems

Transportation is a total system to provide for the movement of people and goods. The various modes of transport, such as rail and bus transit, commuter and long distance railroad lines, urban and rural highways, bikeways, pedways, pipelines, transmission lines, air and water routes, are elements to be coordinated, integrated and utilized to provide mobility.

Integrated systems of transportation are composed of multi-modal facilities acting together to provide a balanced, cohesive transport network. In a balanced system, the network includes those modes of transportation that are best suited to perform the transport functions demanded. An essential element of a multi-modal network is the inter-modal transfer, which provides for a smooth transition between one mode and another. An airport is essentially a transfer point between air transportation and ground transportation, as a railroad station is a transfer point between rail transport and local access modes.

4. Engineering and multi-disciplinary studies

Thorough studies are vital to the provision of sound transportation. Studies should be scaled to the complexity and scope of the problems. Conclusions and reports must be supported by complete information on all facets, with special attention to inter-modal transfer requirements and potentials. The studies must provide total costs, financial plans, and factual analysis to develop all feasible alternatives. They should consider over-all economic and social consequences as related to combinations of modes in system planning, project planning, and maintenance and operation. Safety, service, transport cost, environment, energy utilization and conservation, aesthetics, and conformity to land use goals and objectives are all elements to be considered.

Engineering studies include advice, evidence, and evaluations by professionals in other disciplines, as well as by affected citizens, business groups and public officials.

5. Economic evaluation

Transportation facilities are justified when the total social and economic benefits offset total costs. Benefits include direct and indirect transport and non-transport benefits to users and non-users, public and private. Costs include both direct capital and operating costs, discounted with interest, and indirect costs. Non-quantifiable benefits and costs should be identified and scaled separately to aid judgment values of decision makers. Though some parts of a transportation system may not be economically justified in themselves, they may be necessary to make the system whole. Such cases should be analyzed to determine whether the benefits from the whole system provide justification for the essential part.

6. Incentives to private enterprise

Private investment in transportation should be encouraged at all levels, subject at all times to the public interest. The best incentive for the private sector is to receive adequate return on investment. This may be achieved through competition, innovation, and greatest reduction possible in restrictions on manpower utilization. Private operation of transportation facilities requires regulatory policies to assure reasonable rates and adequate service to the public, but governmental regulations should be applied to the minimum extent necessary to protect the public against inequities between carrier and customer, between the several areas of the country, between modes of transportation, and between operating public agencies and their constituencies.

7. Financing transportation facilities

Guidelines for the financing of transportation facilities, and the charges made for their use include the following:

- a. The full cost of providing a transportation service, including maintenance, operation and amortization of the investment, should be equitably allocated among, and collected from the several categories of beneficiaries. These include both users and others, such as land and building owners, groups of citizens, communities, and the nation.
All direct users of transport facilities should pay user charges in some form. Charges established should take into account the availability and level of service, the amount of use, and such costs as may be incurred in providing for various types, sizes, weights, and speeds of transportation units.
- b. When essential transportation for the public is provided by private companies or quasi-public agencies government must assure continued availability of the services needed. To the extent that the required service cannot be funded from user charges at a reasonable price, considering both costs occasioned and benefits received, public financial support should be provided from sources related to the kinds of benefits provided. Such subsidies should be provided by various levels of government in the amounts justified by demonstrated benefits.
- c. To the greatest extent practical, decisions on the location, manner, and method of use of public funds for improvements to transportation facilities should be made at the lowest level of government having jurisdiction over the transportation system involved. Under certain circumstances the maintenance, operation, and rehabilitation or upgrading of existing facilities may rate a sufficiently high priority to justify use of a portion of public funds for these purposes.
- d. Local authorities should have a degree of flexibility in the use of available federal funds for transportation. The primary purpose of federal aid is the acquisition of new and improved transportation plant and equipment.
- e. Other factors requiring consideration in the allocation of financial aid to public transportation facilities include measured or projected passenger-miles of service, conservation of resources, and the socio-economic impacts of such funding.

8. Research and Development

Transportation benefits greatly from research and development, in which the private sector continues to carry the prime responsibility. However, state and local governments also should participate, and the federal government should play an important role in promoting, financing, and coordinating research, studies, and large-scale demonstration projects to assist in developing new technology which has nationwide applicability.

9. Conservation of resources

A wide range of alternatives to conserve resources must be considered, including land use policies, reduction of travel needs, better management and operation of transportation facilities, reduction of peak demands, and more efficient vehicles. To the extent possible, any individual or group should have a choice of the transportation vehicle or mode or combination of services that he will use, within sound principles of competition, regulation, environmental protection, conservation, availability of service, financing, safety, and economy. All sectors of society should be served. Conservation may require that in some circumstances, and especially in large urban areas, emphasis be placed on public transportation modes.

In the interests of conservation and optimum land use, multiple use and joint development of existing and future transportation corridors should be sought. Established corridors should be preserved for future transportation use, recognizing that once corridors are abandoned, future alternatives are diminished.

10. Public organization for transportation

Cooperative federal, state, regional, and local efforts provide a sound framework for organizing transportation planning and development. In each level of government, public responsibility for transportation should be lodged in one organization, which should be charged with coordination of all transportation modes within its jurisdiction, wherever feasible. In multi-government metropolitan areas, area-wide transportation planning and implementation should be fully integrated. Early and continued policy guidance of elected officials, and the participation of community representatives, is essential in the planning of transportation systems.

Transportation and the Civil Engineer

Civil engineers are directly concerned with providing the facilities that enable people to function within their communities, at their work and in their social and recreational activities. By training and experience, civil engineers are made sensitive to the needs of people in relation to their environment.

The planning and development of transportation systems is one of the principal activities to which civil engineers devote their careers. In the creation of these facilities, however, civil engineers are concerned with the improvement of the entire life support system and are conscious of the impacts and secondary effects that individual projects may have, while also considering costs and trade-offs that must be made.

The American Society of Civil Engineers has fully endorsed the nationwide effort to incorporate environmental concerns in all planning and construction, and recognizes interdisciplinary cooperation and community participation as effective tools for assuring the achievement of people-oriented goals. By encouraging such recognition and by formulating the basic principles of transportation policy in this statement, the Society seeks the advancement of transportation programs that will promote a better quality of life for all segments of the population, without sacrificing basic standards of service and safety.

The foregoing statement was prepared by the National Transportation Policy Committee of ASCE. The following are, or were at the time of the study members of the Committee:

James O. Granum, Chairman 1974-75
William J. Hedley
Elmer B. Isaak
J. Burch McMorran
James W. McPhillips
Ben E. Nutter
Ira N. Pierce

PROPOSAL FOR NATIONAL TRANSPORTATION POLICY

Submitted To:

The Honorable Lloyd Bentsen
Chairman, Senate Transportation Committee
United States Senate
Washington, D. C.

Submitted By:

Kenneth M. Good
3110 Bryan Tower
Dallas, Texas 75201

In this proposal, I will address four major topics:

- I. The funding of the Interstate Highway System.
- II. The federal funding of other highway programs.
- III. The federal funding of development and construction of mass transportation systems.
- IV. The federal funding of grants to states for their designated transportation needs.

All of the above programs would be funded by replacing the present 4¢ per gallon Highway-Users Tax with a new Energy Conservation Tax of 6¢ per gallon on gasoline with retention of other existing fuel taxes. The taxes would be deposited in a special designated fund replacing the Highway Trust Fund, such fund to be called the Transportation Trust Fund, which would be funded by the above taxes for ten years as follows:

- I. The completion of the Interstate Highway System would be funded by allocating one-third (2¢ per gallon) of the Energy Conservation Tax along with other existing fuel taxes to the exclusive use of the Interstate Highway System. These funds should continue to be apportioned among the states based upon the relative cost of completing construction of the entire Interstate system in each state. Each state then can continue to determine which routes should receive priority within its own construction program. Additionally, since the fund available for the Interstate System under this plan would be approximately double that available under President Ford's proposal, completion of the existing Interstate Highway network could be projected within the next five to eight years. Other additions to the Interstate Highway Act would be as follows:
 - a. All sections dealing with the transfer of funds to other uses, such as mass transportation, would be modified to provide that such funds could be used by each state for other transportation projects only after the entire Interstate Highway System is completed in that state.
 - b. An additional 2,500 miles would be added to the Interstate System for future designation. Each state would be able to designate its prorata share of additional mileage; however, funding of the additional mileage would have a lower priority than the completion of the present Interstate System and therefore no state could use more than 25% of its annual allocation on new Interstate designations.
- II. Federal participation in roads other than the Interstate Highway System, would be financed by an allocation of one-third (2¢ per gallon) of the Energy Conservation Tax.

- III. Recognizing the urgency of development of alternate forms of transportation, particularly in certain urban areas where densities justify the development of mass transit systems, it is proposed that one-sixth (1¢) of the Energy Conservation Tax be used exclusively for development and construction of mass transit systems in urban areas. In those areas not having population density necessary to support fixed rail transit systems, the monies could be spent for acquisition of buses and other mass transit systems. Such a tax, effectively increasing the present cost of gasoline by 1¢ per gallon to highway users, would discourage unnecessary use of the automobile, and by providing for federal funding for mass transit development and construction, would certainly give governmental financial support to develop alternate means of transportation that could effectively reduce energy consumption.
- IV. Recognizing the need of many of the states for financing their portion of the various federal highway programs and their needs for additional monies for mass transportation development, one-sixth (1¢ per gallon) of the Energy Conservation Tax would be funded directly to each state having a State Transportation Commission.

In summary, the adoption of such an Energy Conservation Tax provides the following benefits:

1. Energy conservation would be encouraged by an additional 2¢ tax, making the federal excise tax on all gasoline 6¢.
2. Energy conservation would be encouraged by the allocations of the funding:
 - a. Although 4¢ would continue to fund highway projects, by hastening the completion of the Interstate System through allocating 2¢ per gallon for its exclusive use, the Federal Government will encourage energy conservation by elimination of unnecessary distances and start and stop traffic.
 - b. By designating 1¢ of the 6¢ Federal Highway User Tax exclusively for mass transit construction and development, recognition is given that alternate forms of transportation are necessary and that the Federal Government is encouraging the development of these alternate forms that might be necessary for the future conservation of energy.
 - c. By designating 1¢ to each state, the Federal Government enables the states to determine their own transportation priorities and to have available the funding necessary for the important energy conservation programs each deems most suitable.

Politically, the adoption of such a program as the Energy Conservation Transportation Act would appear to be quite palatable to political leaders in the various states, and the various organizations and special interest groups interested in energy

conservation, highway building and mass transit development. The only significant drawback of the plan would appear to be that it obviously would increase the price of gasoline by 2¢ per gallon; however, this seems quite minor compared to the energy conservation tax proposed by Chairman Ulman of the House Ways and Means Committee of approximately 23¢ per gallon. The plan also incorporates a significant portion of those advocated in President Ford's proposals for the Federal Aid Highway Act of 1975. However, the above plan seems to better assure a prompt completion of the Interstate Highway Program and should be politically far more acceptable to the many senators and congressmen concerned with the retention of the Highway Trust Fund. Additionally, by including highway use taxes of 2¢ per gallon, energy conservation is encouraged in the short run by discouraging consumption and in the long run by diverting such funds to the development of mass transit alternate forms using and consuming less energy.

[Whereupon, at 11:35 a.m., the subcommittee recessed, to reconvene at 9:30 a.m., Thursday, July 31, 1975.]

FUTURE OF THE HIGHWAY PROGRAM

GENERAL WITNESSES

THURSDAY, JULY 31, 1975

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION,
Washington, D.C.

The subcommittee met at 9:35 a.m., pursuant to recess, in room 4200, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee), presiding.

Present: Senators Bentsen, Gravel, Burdick, and Stafford.

Senator BENTSEN. These hearings will come to order.

This is the final day of our hearings and discussing of "the future of the highway program." We have had 10 days of hearings with over 50 witnesses. They have come from all levels of government; from formerly administrative positions in transportation, from private industry, from citizens and environmental groups. I said when these hearings began I didn't want just another set of highway hearings.

I wanted a full review of our highway program and how it fits into an integrated transportation system around this country. To make these hearings focus more sharply on the issues, we have asked all of the witnesses, until this day's hearing, to sit in panels and respond to one another's views. I believe we have had some very productive discussions of the most serious issues in transportation today.

All of us participating in the hearings have learned a great deal.

Above all, we have learned that transportation questions are interrelated. We have learned that this Congress and the Senate in particular ought to be consolidating transportation jurisdiction in one committee where we can talk about highways and mass transit or any other form of transportation.

We have to discuss their impact on other forms of transportation on quality of life in our society. I think we have done that in these hearings.

Today we have two very distinguished Senators with a long history of concern about transportation problems and this bill, S. 1300, has some provocative ideas for the future. We are pleased this morning to welcome Senator Kennedy and Senator Weicker to these hearings. I believe just about a year ago you two gentlemen testified before this committee. Which of you gentlemen would prefer to start out?

STATEMENT OF HON. EDWARD KENNEDY, U.S. SENATOR FROM THE STATE OF MASSACHUSETTS

Senator KENNEDY. Thank you very much, Mr. Chairman. I first of all want to tell you how much Senator Weicker and I appreciate the fact that you have held these hearings and also to thank the distin-

guished Senator from West Virginia, Senator Randolph, who we know has been perhaps one of the most effective spokesmen for the development of a national highway, not only the trust fund, but a system which benefits many of the people in my own State and throughout this great country. He has been tireless in his pursuit of this endeavor and all of us recognize the great contributions that he has made to, I think, transportation, the movement not only of individuals, but of the commerce of this country.

We want to recognize and notice his presence here today and want to recognize his contribution.

Senator Gravel, members of the committee, very briefly, Mr. Chairman, you are very much aware of the interest that Senator Weicker and I and other members have had about the concept for the development of the Highway Trust Fund. We have felt for some period of time, over 3 years now, Senator Weicker and I together, and previously as individual Senators, that there has to be an adjustment and accommodation in ending the trust fund; not in any sense ending the U.S. commitment or the commitment of the Federal Government towards helping and assisting in the automobile transportation and developing the Interstate System and helping in assisting States in the development of transportation for motor vehicles, but also to try and be able to develop a more meaningful balanced transportation fund.

I think I noticed during the period of your days of hearings you have listened to testimony of Mr. Allen Brody, who I think made one of the fine presentations about the importance of planning, programming and looking ahead and in being able to balance the various interests in the transportation area.

It seems to us that one of the basic approaches that we have developed is recognition, first of all, of the importance of planning and programming at the State level; that this is extremely essential and we have outlined in our legislation how that planning ought to be made.

It is left up to the States to set some very general kind of guidelines and we think will be consistent with the development of a program which will affect not only the individual States, but other areas of our country.

We think that is extremely important. We have also, Mr. Chairman, recognized that the administration has moved towards some of the views that we have expressed over a period of time.

We commend the administration for trying to return some of the funding to the States, but we notice, Mr. Chairman, that with the return of funding to the States that most of the States' legislation require that the money that would go to the States to be picked up in the tax would have to be allocated again in the area of automotive transportation.

This is a matter of some concern to us.

We have tried to organize a grouping of various kinds of programs into more, we think, responsible categories of the four different areas, which would be interstate, urban, rural, and safety.

We have attempted to try to provide a greater voice for the rural areas in the development of the State programs so that in the recognized importance of the development of not only automotive transportation, but also mass transportation, the voice of rural America and

there are many parts, even representing the industrial State, many parts of rural Massachusetts, that ought to have their voice developed in the form of a State program.

We have outlined as well the various uses of the funds and the ways in which we think are more expressive of the modern demands and needs of the States and local communities in meeting their transportation needs.

I don't think any of us, Mr. Chairman, have to review for this committee the recognition that given the problems that we are facing in energy, of the recognition that savings in one bus is the equivalent of the 35 automobiles and the railway car is comparable to 70 automobiles and a gallon of fuel used to move people in mass transit vehicles will conserve 17 gallons of fuel that would otherwise be used to move automobiles and doubling the transit riders would save 178,000 barrels of fuel per day.

I think we believe this is an idea whose time has come. We think it will provide a more effective and meaningful automotive transportation by relieving the congestion in the highways of this country. We think it is a sound proposal from an energy point of view. We think it is a sound proposal from a transportation point of view.

We have tried to, in our proposal, make recommendations and suggestions which represent our best judgment to meet this particular need in the area of transportation for our country.

Senator BENTSEN. Senator Weicker. Thank you, Senator Kennedy. If you will stay, we will have questions for the two of you.

STATEMENT OF HON. LOWELL WEICKER, U.S. SENATOR FROM THE STATE OF CONNECTICUT

Senator WEICKER. Thank you very much, Mr. Chairman. My appreciation to you and Senators Gravel and Stafford for having these hearings, and Ted Kennedy for sticking with it over these years as he said, not just together, but I remember when I first came to the House in 1969, I was doing my thing in the House and he doing the same thing over here in the Senate, trying to bring the balance to our transportation systems.

Back in 1969, I would say the Highway Trust Fund was something that nobody even uttered one word against. Now it is being discussed which is good.

I believe we will stick to this idea of not trying to eliminate the Highway Trust Fund, but to rather go ahead and enhance all modes of transportation.

Mr. Chairman, I have a statement which I would like to submit, for the record, in its entirety. What I would like to do is just state a few things from that statement.

In 1974, \$7 billion was spent on transportation development in the United States. A full 61.6 percent of it went to highways; 17.2 percent was spent on air transportation; 8.1 percent on mass transit; and 3.1 percent on rails.

Senator GRAVEL. Would the Senator repeat that?

Senator WEICKER. In 1974, \$7 billion was spent on transportation development in the United States, 61.6 percent went to highways; 17.2 percent went to air; 8.1 percent on mass transit; 3.1 percent on rails.

These statistics tell the story. I might add they are statistics that are substantially up in previous spending on rails. Actually, in the last 20 years the average would be somewhere around 80 to 85 percent on highways, roughly 10 percent on air, and roughly 4 percent on waterways and roughly 1 percent on rails and mass transit.

These are the 1974 figures which indicates slight shifts in our priorities. But the statistics do tell the story, whether the statistics are of 1974, whether they are the statistics of the last 20 years. We are getting what we paid for which is a very fine road system with little else.

It is time to develop a sensible national transportation policy that integrates different modes of travel. Our unequal and fragmented approach to transportation funding has led to a society dominated by the automobile. More than four out of five American families own cars today and 90 percent of all urban travel is by car or truck. We are now faced with no alternative but to cut back drastically on our consumption of gasoline, we must make basic changes in our means of travel. We talk of conservation, but we have not done anything about it.

As of June 10, 1975, the FEA estimates that 6.8 million barrels of gasoline are used to move our automobiles each day. Reduction in the use of motor vehicles is essential to any meaningful fuel conservation effort.

Presently, 70 percent of all travel in the United States is by automobile, while only 1.5 percent moves by bus, and 15 percent by rail. It is no surprise that traveling Americans choose air-conditioned automobiles to an outdated, poorly equipped public transportation system.

Senator WEICKER. Until we offer the American people a real choice, Americans will continue to be automotive lemmings.

Mr. Chairman, the present programs which have resulted in the proliferation of only highway construction is contrary to our national effort to conserve our fuel and to clean our air. We must revise our transportation funding structure to give States and cities and towns the flexibility they need to use Federal transportation funds in a manner that reflects their needs in the seventies.

Since 1956, we have placed the formulation of transportation policy on automatic pilot. It is time to reconstruct our transportation funding and planning mechanisms.

S. 1300, introduced by Senator Kennedy and myself, seeks to take transportation policy out of concrete. It seeks to provide a means to develop a balanced transportation system in the United States.

I would like to submit the entire statement for the record at this time. (See p. 1778.)

I would like to conclude by saying I think in the past persons have purposely tried to set up a conformation between urban-type States such as Massachusetts, Connecticut, New York and those with great spaces, like Alaska and Texas by suggesting that we are trying to do away with highways. Obviously, certain areas demand highways. However our urbanized areas require mass transit.

But I can understand where possibly in your States the balance has to be on the side of highways. You can't eliminate highways. There should be no confrontation between us at all. All we are saying is let

us have a mechanism that realizes the individuality of each State and its particular problems.

Unfortunately the present mechanism does not do that. It is not with any idea in mind that I want a confrontation or we should dominate insofar as the urban areas are concerned, not at all.

Let us just be men and women of intelligence and commonsense and logic; do our own homework as to what the national transportation needs are.

It is a great opportunity because it is not just a problem of mobility; it is a problem of the environment and a problem of energy.

It is all right for all of us to stand up here and say how we want to have an energy policy, but a critical part of that policy is our travel methods. Clearly the time has come to develop more energy efficient modes of transportation.

So I would hope that this committee, gentlemen before us, would pioneer in this effort and bringing commonsense to three very critical problems.

Senator BENTSEN. I thank the distinguished Senator. I must say that a number of us on this committee have been very concerned about mass transit. I for one, chairing the subcommittee, held mass transit hearings across this Nation last year and was one of the cosponsors of the Williams bill and a strong supporter of it.

I can recall riding in the subway in New York and riding BART in San Francisco. I can't help but be reminded of it when you talk about great expenses of Texas that one of the reporters said to me, "What in the world is a Senator from Texas interested in mass transit for?"

I said, "Well, I happen to represent the sixth largest city in the Nation and live in that city and also represent the eighth largest city in the Nation and I know what it is to drive down that freeway at 14 miles an hour breathing the fumes of the car ahead of me. We don't happen to be all cows and cowboys out there. We have some problems of the great urban areas."

So I share that concern. But I also know in riding BART, for example, which is one of the most sophisticated mass transit systems, rail systems in the world. I am very much impressed with it. It is fast, convenient, it operates much better than its press clippings. Those failures have been really very small, no fatalities, no serious injuries, but they are a long ways from getting the kind of passenger load factor that they anticipated.

I get a little concerned that we might be making some of the same mistakes in overselling mass transit particularly if we are talking about rail mass transit that some of the mistakes we made in overselling some highways, possibly, in the fifties. We may go too far in that, that there is a lot more to mass transit than just rail mass transit.

Would you care to comment on that?

Senator WEICKER. I don't think you have to worry about overselling mass transit right now. It is not just a matter of rails. We also include buses in the category of mass transit.

But really there has been no substantial effort on the part of the Government or the policies of this Government to sell mass transit. All of our policies are geared to the automobile, both private and Government, build them, ride in them.

I have been against, Senator, a mass transit trust fund, for the very reason that you enunciate the creation of such a fund will put us on an automatic pilot that you can't turn over. But as far as overselling the idea, you can't do that until you really get off the ground funding-wise and policywise and neither in the private sector or in the Government segment have we tried to sell mass transit.

Senator BENTSEN. They have sure done it in the San Francisco Bay Area. I am very much impressed with that system. I think it is just great. It is a problem to get people to ride it.

Senator KENNEDY. One of the problems, Mr. Chairman, we have the oldest subway system in the country. But the fact of the matter is even with the additional resources that have been made available to, for example, the mass transit in Boston, they have been extremely modest sums. In terms of getting the major kind of overall, just in terms of the surface transportation, we are probably about a year away, 15 months away, it really hasn't been given the kind of fair and reasonable try.

We still have been slow in moving, even though they have had a blueprint program, to reach out into some of the suburban areas which is a very well constructed and, I think, very thoughtful and I believe will be a successful program. They haven't had the resources to reach out there.

So many of these systems which are just located such as in Boston, actually with a declining population and a movement towards the suburban areas, the whole kind of base actually has been the form restriction.

If you are able to reach on out into some of the suburban areas, that any kind of fair and reasonable funding program will provide, the plans are there, I am absolutely convinced that it will provide the kind of integrated transportation system for metropolitan areas which will be successful.

I am not familiar. I have obviously seen the BART system in San Francisco. I don't know their return on revenues. It was enormously expensive in building. But it does seem to me we really haven't given this kind of try that it needs. I think it needs additional kinds of resources and it needs the kind of assistance in terms of some operating assistance which we are only just beginning to come about to provide in these areas.

Otherwise, as I understand in New York City for example, if they were to provide the ride there on the basis of the cost, you are talking about close to 60 cents, or 65 cents a ride.

Senator BENTSEN. Instead of the 35 cents.

Senator KENNEDY. So you are facing these kinds of problems.

Senator BENTSEN. Let me give you an example, one that really seems to be working well, that is in Atlanta, where the bus system there is a 15-cent fare any place in town. They have diagrams at the bus stop where you can really see where the bus is going and where it is coming from.

They are clean, modern buses. The people are riding that bus system which is quite effective.

Senator WEICKER. Mr. Chairman, only because I have to chair the Watergate reform hearings upstairs, I would like to make one brief comment: I guess it was last year that the President signed a 6-year

bill, \$11.8 billion of mass transit over a 6-year period. This is what I was referring to before. You have got to be kidding: \$2 billion a year for mass transit in a country that basically has no mass transit is ridiculous. That is not a commitment.

We could use \$2 billion in the State of Connecticut alone, and I am sure Massachusetts could. So all I am trying to say is really that is window dressing as to what the actual need is. As I say, the statistics bear out what I am talking about when you consider what it is we committed to ourselves in the ways of other modes of transportation.

Senator BENTSEN. Let me comment on the 55 miles an hour. That came out of this committee. We had teeth in it. We required certification by the States that they are enforcing it. We are now beginning to audit that and try to withhold funds if they don't do it.

Senator WEICKER. I hope you are. None of them are.

Senator GRAVEL. I think there is great merit in what you are saying. There is no question that it is a very independent, fine method of transportation. We may not be able to afford that. We also have an air transportation trust fund. If you remove the Highway Trust Fund you are going to have a movement toward air transportation. Though you leave the choice up to the individual States, which is very good, we still haven't fully evaluated the potential of water transportation. In fact, we have done very little in that area.

The Russians have a hydrofoil system. The British use hover craft effectively. In places like Boston and New York you could use these forms of mass transit. One of the pieces of legislation we will be trying to develop will be a bill providing for an overall study of transportation in this country, trying to equate the differences between rail, highway, water, and air travel, considering both passenger and freight requirements, the interrelationship of this.

I would hope that you gentlemen would possibly look at it and consider cosponsorship. But that would be the next step, after what you are talking about in a more positive sense.

You probably know, and maybe Senator Kennedy knows, why it is that more cities haven't aggressively sought these mass transit funds? Even in Alaska, I have been badgering my communities and they have been very slow in going after these funds. I read recently that only two cities in the Nation have gone after this \$2 billion. Apparently there is a reluctance and I think Senator Kennedy talked a little bit about it.

What do you think is the reason more areas are not going after this money?

Senator WEICKER. You get more money if you build a highway. Any politician that can get the money from outside is going to do that. He gets more money if he solves his transportation problem by building an interstate highway. So he is going to opt for the highway. He doesn't get the 90-10 split if he goes and opts for the mass transit.

Senator GRAVEL. What is the split on the mass transit?

Senator WEICKER. Eighty to twenty.

Senator KENNEDY. I could just mention here, the money coming, of course, has been very slow, Senator. I don't think there has probably been a State that has been more aggressive in applications of

mass transit than my own State of Massachusetts, but they had \$600 million effectively impounded. They have been dribbling this kind of amounts out for any kind of period of time.

I am not sure that it really has been in terms of the administration down here, quite frankly, what it should have been. I just make a final point. The Congress has gone to sort of the budget committee concept of planning and programing which I think all of us have been very much encouraged. It has bipartisan support.

It seems to us if you could do that in terms of major kinds of undertakings, whether it is health or education, we ought to be able to allocate resources in terms of transportation. We would just use that same accepted concept which I think the Congress has now pretty uniformly accepted and apply those same thought processes to our transportation.

Senator BENTSEN. Do you agree we ought to reorganize the committees in the Congress and put all of this transportation together?

Senator KENNEDY. Yes. Then we will do it with health care and start getting the job done.

Senator BENTSEN. Thank you, gentlemen. Thank you, very much.

Senator KENNEDY. Thank you, very much. We appreciate it.

[Senator Weicker's prepared statement follows:]

STATEMENT OF HON. LOWELL WEICKER, JR., U.S. SENATOR FROM THE STATE OF CONNECTICUT

Mr. Chairman, I am pleased to testify before your Subcommittee which has had the foresight to hold hearings on United States' transportation needs.

At the outset, I would like to make some general remarks on the need to revamp current federal transportation policy.

For nineteen years, ever since the enactment of the Highway Trust Fund in 1956, we have relied on a self-perpetuating fund mechanism and have paid the price for disregarding other modes of transportation.

In 1974, \$7 billion was spent on transportation development in the United States. A full 61.6 percent of it went to highways; 17.2 percent was spent on air transportation; 8.1 percent on mass transit; and 3.1 percent on rails.

These statistics tell the story. We are getting what we have paid for—a fine road system, but little else. It is time to develop a sensible national transportation policy that integrates different modes of travel. Our unequal and fragmented approach to transportation funding has led to a society dominated by the automobile. More than four out of five American families own cars today, and 90 percent of all urban travel is by car or truck. But now, faced with no alternative but to cut back drastically on our consumption of gasoline, we must make basic changes in our means of travel. We talk of conservation, but we have not done anything about it.

As of June 10, 1975, the FEA estimates that 6.8 billion barrels of gasoline are used to move our automobiles each day. Reduction in the use of motor vehicles is essential to any meaningful fuel conservation effort.

Presently, 70 percent of all travel in the United States is by automobile, while only 1.5 percent moves by bus, and 15 percent by rail. It is no surprise that traveling Americans choose air conditioned automobiles to an outdated poorly equipped public transportation system. Until we offer the American people a real choice, Americans will continue to be automotive lemmings.

Mr. Chairman, the present programs which have resulted in the proliferation of only highway construction is contrary to our national effort to conserve our fuel and to clean our air. We must revise our transportation funding structure to give States and cities and towns the flexibility they need to use Federal transportation funds in a manner that reflects their needs in the 1970's.

Since 1956, we have placed the formulation of transportation policy on automatic pilot. It is time to reconstruct our transportation funding and planning mechanisms.

S. 1300, introduced by Senator Kennedy and myself, seeks to take transportation policy out of concrete. It seeks to provide a means to develop a balanced transportation system in the United States.

To achieve this end, S. 1300 would make four fundamental changes in the existing highway system:

- (1) Abolish the Highway Trust Fund, thereby integrating the source of funding of transportation programs.
- (2) Remove the restrictions on the use of the federal transportation dollar.
- (3) Consolidate existing categorical programs.
- (4) Institute a comprehensive state planning process.

First, S. 1300 would abolish the Highway Trust Fund by September 30, 1976. The concept of a trust fund has outlived its usefulness. It has perpetuated the myth that highway building has a special status and should be treated differently.

Mr. Chairman, transportation programs must face the same budgetary review as other social programs. In essence, all ground transportation must be funded from the same source—the general treasury.

Traditionally, how much we spent on highways has been determined by the amount of money in the Trust Fund. Highway funding was never placed in the context of an overall transportation policy. By funding transportation programs from the same pot, we will insure equal footing for all modes of transportation.

I commend the Administration for the direction it has taken in reducing the size and purpose of the Trust Fund. Though it did not go far enough, it does offer a practical and attainable solution to this issue.

In addition to eliminating the Highway Trust Fund, our bill also makes three basic changes in the existing Federal Highway Program—changes consistent with the goal of achieving a balanced transportation program. The highway program was designed with the limited purpose of building highways. As such, it contains elements which bias the choices of state and local decision-makers.

The existing highway programs are written so that states and localities have little say in how to use the money they receive. Segregated into narrow categories, the transportation dollar is so earmarked as to actually dictate the very transportation priorities that the planning mechanism is designed to formulate. Because local officials see money in one specific category of an existing program, and none in another, they quite naturally go where the money is, and in the past, that meant highway construction.

If the Congress expects states to implement transportation systems which reflect federal concerns, we must give them the tools to do so. By continuing segregated funding, we deny them the most useful and basic tool to transportation decision-making—the ability to choose plans on their merits rather than on the size of their federal bankroll.

Therefore, the Kennedy-Weicker bill removes any restrictions on the use of the fund distributed to the urban and rural systems. It does not mandate funding for a particular mode of transportation. Highway construction, as well as mass transit can be funded from these sources.

We agree with the Administration that the large number of categorical programs in the highway code needs to be reduced. The proliferation of programs, each with separate purposes and funding amounts, has done nothing but fragment the purposes of our highway program. Therefore, S. 1300 would consolidate the nine categorical highway programs into two—the urban and rural system.

It is important to note, that the Kennedy-Weicker bill maintains both the interstate system and the urban mass transit program. Given the large capital needs of the UMTA program over the next ten years, as well as the interstate system, it is essential to maintain the existing legislative vehicles to direct Federal funds for such purposes. Clearly, in the case of mass transit, there is a "catch-up" time required, before this categorical program can be "folded in" to our bloc grant approach. Thus, where intensive capital needs exist, separate programs are maintained. However, once these capital improvements are achieved, it is envisioned that these separate programs will be consolidated to the revised transportation system, established by this bill.

Finally, our bill would require states to formulate a four-year comprehensive transportation plan. Such a plan would coordinate and integrate transportation needs of both the urban and rural areas.

These planning procedures are designed to force the states to establish priorities in funding various modes of transportation. The officials, closest to the problem, must decide how best to use the limited amount of Federal funds. Their decision will be weighed by the Secretary of Transportation in light of how their proposals comply with Federal guidelines set forth in the bill.

We believe that the appropriate role of the Federal government in transportation is to set forth the goals that state and local transportation systems should strive to achieve, and to implement federal policy to insure that these goals are met. This is an approach analogous to the one adopted for implementing our clean air program.

How the states meet those objectives is their business. However, states must develop a comprehensive transportation plan that is in compliance with: 1) state and federal energy conservation programs; 2) state and federal environmental laws, and 3) community development programs.

Mr. Chairman, we need a balanced transportation system, not a multitude of transportation happenings. As long as we maintain the status quo in our highway programs, progress in transportation will continue at "bumper-to-bumper" speed.

I commend your Subcommittee for conducting these month-long series of hearings on the future of the highway programs. The decisions that are made on this issue will have profound implications on the future direction of our transportation policy.

Senator BENTSEN. Our next witness is Mr. Robbins, president of the Texas Good Roads Association. Mr. Robbins, we are pleased to have you.

If you would present your testimony and limit your oral testimony to 15 minutes, please, and we will take your entire statement for the record. We will use the rest of the time for questions.

STATEMENT OF EUGENE ROBBINS, PRESIDENT, TEXAS GOOD ROADS ASSOCIATION

Mr. Robbins. Thank you, Senator.

As has been pointed out here in earlier testimony, Texas has vast land areas, as you very well know, and low population density. Even in our large metropolitan areas, we have a much lower population density than in the other cities in the north and east. This means that in most cases there is no feasible alternative to highway transportation.

As we point out in our written testimony, we do support mass transportation and hope that we can achieve improved public transportation in our Texas cities also; but we don't think these two programs should be competitive. That is, highways and mass transportation. Both programs deserve a high priority and adequate funding.

Highway construction and maintenance costs have more than doubled since 1967 and during the same period, highway revenues have remained more or less constant and have actually declined in some cases due to fuel conservation measures. The net effect has been to cut the purchasing power of highway revenues in half.

We have critical highway needs in our State that are not being met. The Federal Highway Administration advises us that our highway system in Texas, as well as in other States, is deteriorating 50 percent faster than it is being rebuilt. I would like to give you a very brief summary of some of our most pressing highway needs in Texas.

We have 137,000 miles of county-maintained roads—119,000 of these county-maintained miles are unpaved. This includes many miles of mail and school bus routes which are impassable in inclement weather.

Texas has 6,900 miles of primary highways not including interstate. FHWA advises us that 3,723 miles or 47 percent of this rural primary system is deficient. We have over 27,000 bridges on the State highway system in Texas and about half of these bridges are below present standards either in width load-bearing capacity, or both.

We have 1,344 bridges in Texas that are 20 feet or less in width. We consider these bridges to be critically deficient and potential killers.

We have 13,800 railroad grade crossings in Texas and 10,500 of these are deficient in warning signals. All of these should either have electronic warning signals installed or should be eliminated entirely by the construction of grade separations.

Traffic congestion in our urban areas is becoming intolerable. The city of Houston sent a delegation before our State highway and public transportation commission on June 2, to request \$2.3 billion to complete planned freeway projects. Our State department of highways and public transportation has advised us that they have a critical shortage of funds, major road construction projects are being deferred. The department has announced a no-hire policy to reduce its forces.

They have already reduced employees in the department over the past 5 years from 19,000 to 16,000 and they are currently making a study which indicates they may have to reduce their forces another 20 percent over the next 2 years. Scheduled highway lettings are being canceled and basic maintenance programs are being reduced. Things like litter pickup, mowing the weeds are being curtailed.

Highway safety and farm-to-market betterment programs which consist of overlays, seal coats, reconstruction has been suspended indefinitely. This program amounts to about \$50 million a year, 100-percent State funds. The commission has advised it will use the State funds primarily to match Federal funds to make them go further.

We would like to comment briefly on S. 2078 which includes the administration's proposal for diverting 2 cents of the 4-cent Federal gasoline tax to the general fund. This would reduce the Texas apportionment of highway funds by approximately \$90 million per year. This would eliminate 6,300 jobs in highway construction and allied industries and cause further reductions in State employees. This will have a ripple effect throughout the economy.

Mr. Chairman, members of the committee, we respectfully urge you to extend the Highway Trust Fund indefinitely, to continue the dedication of all of the existing Federal highway user taxes to the trust fund, and to increase the annual authorizations to the States to the maximum amount the Highway Trust Fund will support.

Thank you, very much, Mr. Chairman. We appreciate the opportunity to express our views on this important legislation.

Senator BENTSEN. Thank you, very much, Mr. Robbins.

I am curious about a statement you made on page 9, of diverting 2 cents of the 4-cent gasoline tax to general revenues would cost Texas approximately \$90 million. Where do you get those figures? My understanding is that the formula for dispersing the funds would remain the same.

Mr. ROBBINS. We figure this on the basis that the apportionment formula would be the same. If that is true, then our apportionment would be reduced by approximately 30 percent. We arrived at this

through the fact that 60 percent of the revenue of the Highway Trust Fund comes from the Federal gasoline tax.

You reduce that by half, that means you would be reducing the income 30 percent. Our annual apportionment in Texas is approximately \$300 million.

Senator BENTSEN. Yes; but you keep the gas tax. There is no reduction in gas tax.

Mr. ROBBINS. You keep the gas tax, but you instead of putting the 2 cents in the Highway Trust Fund, put it in the general revenue fund.

Senator BENTSEN. The administration argues that doesn't mean a reduction.

Mr. ROBBINS. I see what you mean. They are saying that they would appropriate those funds out of the general revenue.

Senator BENTSEN. That is right. That is their argument and that is their testimony, of course.

Mr. ROBBINS. Our concern is that there would be no assurance that that appropriation would continue from the general fund.

Senator BENTSEN. We understand that.

You talk about the need to upgrade the rural roads in Texas. Would you favor using the trust fund for off-system roads?

Mr. ROBBINS. Yes, sir. I think so. Of course, I think that we have some small programs now in the Federal-aid program where funds are made available for such things as bridge replacement off the system. I think that would probably be a good thing providing the latitude for the use of the funds is left up to the States.

Senator BENTSEN. You make quite a case about some of the bridge problems in Texas. The administration bill, as I recall, will fold the bridge category into an overall safety category. Would you agree with that or not? Do you think it should remain as a separate category, bridge replacement?

Mr. ROBBINS. Mr. Chairman, we are not that much concerned about the categories of funding. We would like to see greater flexibility by the States in the use of the funds. Perhaps this would mean a combining of some of the categories.

Senator BENTSEN. I am very pleased to see that you merged your mass transit into a new transportation agency.

Mr. ROBBINS. Yes; sir.

Senator BENTSEN. I argued for that when you came down to the hearings in Atlanta.

Mr. ROBBINS. Yes.

Senator BENTSEN. I didn't make much headway that day.

Mr. ROBBINS. The commission was present at that hearing. Apparently, they took to heart some of your comments because they did support this legislation. Our organization supported it. Governor Briscoe supported it. It was passed in this recently concluded session of our legislature. We all feel it is a very constructive move.

Senator BENTSEN. Thank you, very much. We appreciate your testimony. It will be very helpful to us.

[Mr. Robbins statement follows:]



TESTIMONY
OF THE
TEXAS GOOD ROADS/TRANSPORTATION ASSOCIATION

BEFORE THE
TRANSPORTATION SUBCOMMITTEE
OF THE
PUBLIC WORKS COMMITTEE
UNITED STATES SENATE

BY
EUGENE W. ROBBINS
PRESIDENT

JULY 31, 1975

Mr. Chairman and members of the Subcommittee.

My name is Eugene W. Robbins. I am President of the Texas Good Roads/Transportation Association.

TGR/TA has offices in Austin, Texas. It has a direct membership of 2,200 firms, individuals, and organizations in all parts of the state. TGR/TA organization members and cooperating groups have a combined membership of approximately 280,500.

This is a diverse group of citizens including businessmen, doctors, lawyers, manufacturers, oil producers, food processors and farmers. Our membership includes those who build our road and transportation systems -- as well as those who use them.

TGR/TA has been in continuous operation for 43 years. Its existence actually started before that, shortly after the turn of the century. TGR/TA sponsored the state legislation which created the Texas Highway Department in 1917.

During most of this time, our organization was concerned exclusively with an adequate system of roads to meet the needs of the people of Texas. Last year, the organization was restructured to support other transportation modes -- in addition to its traditional interest in roads.

TGR/TA vigorously supported bills enacted in the 64th Texas Legislature to merge the Texas Highway Department and Texas Mass Transportation Commission -- and to create a state public transportation fund from general revenue. We also supported legislation to permit the state to participate in the development of Texas waterways. We are beginning a program to enlist public support of a statewide airport development plan.

In addition to my position as President of the TGR/TA, I am currently

2/U. S. Senate testimony

serving as Chairman of the Better Roads & Transportation Council. BR & TC is a federation of state good roads and transportation betterment organizations in 47 states.

I am submitting as an attachment (Exhibit A) to my testimony a BR & TC policy statement adopted July 31, 1974 in Nashville, Tennessee. This statement contains recommendations regarding national highway and transportation programs.

Other than this attachment -- and the references made previously to our interest in other transportation modes -- I will confine my testimony to highway needs in the state of Texas.

There are over nine million motor vehicles registered in Texas. Geography makes us dependent on those vehicles -- and our roads and streets -- to get to work, to take our children to school, to transport the food we eat, and for many other essential transportation needs.

Texas has vast land areas and low population density -- even in our largest metropolitan areas. This is a fact of life to us. It means that -- in most cases -- there is no feasible alternative to highway transportation.

While we have recognized the need for improved public transportation, in most cases that need will be met with rubber tired vehicles using public roadways. A substantial investment is needed to provide fringe parking lots, passenger shelters, bus ramps, and preferential bus lanes on freeways.

It is a contradiction in Texas to say that you will reduce highway expenditures and improve public transportation.

To put it another way, the increased emphasis on improved public transportation in no way reduces the need for an adequate system of roads and streets.

For much too long have highways and mass transportation been presented as an either/or situation. Those who advocate one mode at the expense of the other do a disservice to both. The fact is, we need a massive infusion of funds

3/ U. S. Senate testimony

for both highways and mass transportation.

One of the vital manifestations of freedom is mobility. The Texas Transportation Institute advises us that some time during the past decade, our mobility peaked -- and we have been losing ground ever since.

Good roads have been a tradition in Texas. So much so that it has been difficult for us to realize that we are facing a crisis in highway transportation.

This crisis is of such proportions that the 70,000-mile state highway system -- which has been a source of pride to Texans -- is in jeopardy of becoming a source of embarrassment.

Highway construction and maintenance costs have more than doubled since 1967. During the same period, highway revenues have remained more or less constant -- and have declined in some cases due to fuel conservation measures. The net effect has been to cut the purchasing power of highway revenues in half.

The Texas Department of Highways and Public Transportation estimates that -- at the present funding level -- it will take all available revenue by 1980 just for maintenance, with no funds available for upgrading obsolete roads and bridges or new construction.

According to the National Transportation Needs Study of 1972, Texas will have to spend \$42.4 billion on highway improvements by 1990 to support a growing population. Current revenues will provide only \$26 billion, leaving a deficiency of \$16.4 billion.

The Texas Transportation Institute has estimated that by the year 2000 the volume of traffic could be 4.24 times the traffic on Texas roadways in 1973. This was arrived at by reducing the increase ratio the state has been experiencing by one half. These Texas A&M University experts conclude that transportation facilities in the state must be substantially increased to meet future needs.

4/U. S. Senate testimony

Rather than catching up with these needs, we are falling further behind. An official of the Federal Highway Administration has advised us that our highways are deteriorating 50 percent faster than they are being rebuilt.

There are 137,114 miles of county maintained road mileage in Texas -- including 119,015 miles of unpaved roads. Many miles of these roads are school bus and mail routes which are impassable in inclement weather.

I would like to cite some specific examples in order to translate these impersonal statistics into human frustrations.

I quote from the BEAUMONT ENTERPRISE of June 28, 1975:

"Fannett residents have visited commissioners court three times this year to ask for improvements on county roads and wooden bridges in that area and last year presented petitions with 500 signatures to Commissioner Jim Smith... said Hal E. Wingate...Wingate, a Hamshire Fannett school board member who headed a group that met with commissioners court in March and April, said he pointed out then the bridges are a safety hazard for school buses carrying about 500 school students over them twice a day.

"A Port Neches man, Joe William DeBord, died late Tuesday night when his car apparently plunged from one of those bridges...over the south fork of Taylor's Bayou.

"Hamshire Fannett School Superintendent W. L. Campbell, Jr....confirmed that he and others in the community have been concerned about school buses travelling over the one-way wooden bridges.

"Last year one school bus had a minor accident on the Jap Road bridge... The bridges have runners which are slick when wet and, if tires slip off the runners, it may go out of control, say community residents who travel the bridges. Several cars have gone in the bayou from the Craigen Road bridge and the Jap Road bridge...Railings on the bridges are low and sometimes left

5/U.S. Senate testimony

unmended."

From the AUSTIN AMERICAN-STATESMAN of July 11, 1975:

"Hays County Commissioners told state highway department officials Thursday they have two number-one priorities for farm-to-market roads in the county.

"Meeting in a Thursday session, commissioners said both roads are needed to transport school children and learned that both are expensive proposals.

"In April the county fathers had listed their number one priority in a 15-year County Transportation Plan as a farm-to-market road between Kyle and San Marcos to transfer hundreds of Buda, Dripping Springs and Wimberly area students to the Hays Consolidated School in Kyle.

"The route presently used to take the rural youngsters to the Hays school runs through the San Marcos school district and when heavy rains fall it is sometimes impassable.

"Last month a group of parents, concerned about a San Marcos bus route east of IH 35 on Thompson's Island Road, asked the court to use its influence with the Highway Department to get a new bridge and road improvements along that route...

"District Highway Engineer Travis Long hinted that both projects may be a long way off.

"We never seem to have enough money to do all the things people want done. We now have about \$1 million to spend, but there are 11 counties and when you start talking about \$100,000 for each county you really can't get much done.

"I wish I could tell you we could build both of these roads but there's no way," he said..."You're talking about a lot of money and at this point I cannot be encouraging. We do have some counties who haven't had anything done for four years."

On September 5, 1974, Mrs. Harold Ahrens, a resident of Atascosa County, wrote:

6/U.S. Senate testimony

"...Our rural school bus routes in our county and as well in some other counties are deplorable and still in horse and buggy day conditions, where they should be and could be improved to be travelled in all weather conditions... We hear so much about mass transportation but never about the rural roads that transport our school children or the farm products. There are many days when the school buses cannot travel some roads...I feel the eyes of our public officials need to be opened to the needs of the rural people in regard to better roads...For God's sake won't some one listen to the rural people!"

These are not isolated cases -- they are representative of critical needs which exist in each of the 254 counties in Texas.

Texas has 10,036 miles of unpaved rural collector roads -- of which 8,536 miles (or 85 percent) are classified by the Federal Highway Administration as intolerable. The term intolerable relates to roadway width and surface. Of the 46,738 miles of paved rural collector roads, FHWA says 7,416 miles (or 16 percent) are intolerable.

Texas has 6,960 miles of rural primary highways (not including Interstate). FHWA says 3,273 (or 47 percent) of our rural primary roads are deficient. In roads classed as minor arterials, Texas has a total of 10,947 miles -- with 5,385 miles (or 49 percent) classed as deficient.

There are 27,040 bridges on state highways in Texas. Approximately one-half of this number are below present day standards either in width, load carrying capacity, or both. Some 3,200 of these bridges are considered critically deficient in width. These are made up of 1,100 bridges twenty feet or less in width on Farm-to-Market Roads; 1,575 bridges twenty-six feet or less in width on U. S. and state highways; and 525 bridges thirty-two feet or less in width on the main lanes of Interstate Highways. On all state systems there is a total of 1,344 bridges that are twenty feet or less in width. This means that

7/U.S. Senate testimony

one bridge out of twenty on Texas highways is a potential killer like the bridge on US 60 near Fort Sumner, New Mexico, where 19 young Texans died in a bus-truck collision the night after Christmas in 1972. The State Department of Highways and Public Transportation estimates it would cost \$1.5 billion dollars to widen, strengthen, or replace all of these structures to meet present day standards.

We have in Texas 2,400 railroad grade crossings on the state highway system. Of this number, about 840 (or 35 percent) do not have electronic warning devices. Of the 11,400 grade crossings on county roads and city streets (not on the state highway system) 9,700 (or 85 percent) have no electronic warning signals. To install signals at the 10,540 deficient crossings would cost \$320,000,000. The current rate of funding is approximately \$3,000,000 per year.

Many of these hazardous railroad crossings could be eliminated by the construction of grade separations if funds were available.

Critical highway needs are not confined to rural areas. To the contrary, it is in the urban areas where traffic congestion becomes worse each day and citizens are becoming more vocal.

A Houston area delegation -- headed by Mayor Fred Hofheinz and Harris County Judge Jon Lindsey -- appeared before the State Highway and Public Transportation Commission on June 2, 1975.

The delegation urged increased funding for the completion of planned freeway projects. The requests included completion of the following projects in Harris County:

8/U.S. Senate testimony

Beltway 8	\$1,070,000,000
State Highway 225	131,700,000
U.S. 90E	173,800,000
State Highway 288	79,300,000
State Highway 35	128,200,000
U.S. 290	245,800,000
Completion of Interstate Routes	226,000,000
All other Parts of Designated Freeway System	310,590,000
<hr/>	
Total Cost	\$2,365,540,000

A spokesman for the Houston Chamber of Commerce told the Commission, "We need a minimum of \$125 million each year for the next 20 years, just to cover new construction, not including our existing facilities. We cannot continue with the historical funding rate from the Highway Department without a paralyzing loss of mobility and strangulation of our highway users in Houston."

The State Department of Highways and Public Transportation announced on June 27, 1975 that construction of the long planned Woodall Rodgers Freeway in Dallas would be delayed for at least a year for lack of funds. Other essential urban projects have been placed on hold in San Antonio, Fort Worth and other cities throughout the state.

On July 3, 1975 the State Highway and Public Transportation Commission advised the members of the Texas Congressional Delegation that because of a critical financial situation, the Department is operating under a "no hire" policy to reduce construction personnel and reduce operating costs.

The Commission further stated that Texas has obligated 75 percent of all funds apportioned to the state under provisions of the 1973 Federal Aid Highway Act and that the construction program for the remainder of this year and next year must be restricted primarily to Federal aid projects to utilize state funds to maximum advantage.

9/U.S. Senate testimony

The Commission said it is imperative that it receives a firm commitment for funding from future Federal aid programs at the earliest possible time.

The Commission said,

"We believe it is of the utmost importance that the Highway Trust Fund be continued to give us an assured flow of Federal funds to permit long range planning which is so necessary in the transportation area."

I am attaching to my testimony a copy of a letter from the Commission marked Exhibit "B".

To give you further perspective on the critical financial situation, I would like to report that the Department has been forced to cut back on basic maintenance functions such as picking up litter and mowing weeds on the state highway system. The Department has also announced it will stop indefinitely the highway safety and farm-to-market betterment program. This is a 100 percent state financed program consisting of seal coats, overlays and reconstruction projects. In the past, this program has amounted to about \$50 million a year.

Roughly one third of the funds expended in the state highway program in Texas come from the Federal Highway Trust Fund. Any reduction or delay in the flow of the Federal funds would trigger an immediate reduction in the state highway construction program.

Enactment of S 2078, which contains the Administration's proposal for diverting two cents of the four-cent Federal gasoline tax from the Highway Trust Fund to the General Fund would reduce the annual apportionment of highway funds to Texas by approximately \$90 million.

The state would be forced to reduce its planned construction program by that amount. This would eliminate 6,300 jobs in the highway construction and allied industries.

10/U. S. Senate testimony

It would be reasonable to expect that such a substantial reduction in funds would bring further reductions in employment by the State Department of Highways and Public Transportation. During the past five years, the Department has reduced its workforce from 19,337 to 16,721. A current study of personnel needs indicates the possibility of as much as a twenty percent reduction from the present level over the next two years.

Highway transportation provides over one million jobs in Texas. These are:

Motor vehicles and parts manufacturing	10,495
*Petroleum Industry	220,000
Automotive Sales and Service	178,000
Texas Department of Highways and Public Transportation	16,721
County and Municipal Road Workers	12,000
Highway Construction (Contractor and Allied Industry Employees)	46,000
Truck and Bus Industry	677,000
<hr/>	
**TOTAL	1,160,216

*43 percent of petroleum products are used in highway transportation.

**Total employment does not include the Texas tourist industry which generated \$4.8 billion in the state's economy last year. Eighty-five percent of tourists travel by automobile.

The provision allowing the state to levy one cent of the four-cent Federal tax would not appreciably affect the amount of highway funds available. Texas receives less than 60 cents return on each dollar of the tax. However, this would be offset by the fact that as a state tax, 25 percent of the revenue would be dedicated to public schools.

Trucks serve every one of the cities and towns in Texas. There are 1,678 communities in the state (63 percent of the total) which depend entirely on trucks -- they have no other kind of shipping service. This includes 21 entire counties. Due to continuing abandonment of railroad mileage and other factors, the highway system is increasing in importance. From 1960 to 1972, line haul railroad mileage in Texas was reduced from 14,755 miles to 13,381 miles.

11/U. S. Senate testimony

This is a reduction of 1,374 miles or 9.3 percent.

We are so dependent on our highway system in Texas that we have trouble understanding editorials we have seen in Eastern newspapers like the NEW YORK TIMES and WASHINGTON POST. These learned editors say that there is an energy crisis, so we should junk our automobiles, use public transportation and abolish the Highway Trust Fund.

There are two things we would like to say about that argument.

First, highway improvements can be a major factor in conserving fuel. For example, a study has revealed that construction of a new freeway connecting Dallas with the new Regional Airport would save 672,000 gallons of fuel a year. That is based upon the present volume of 8,000 trips per day from the North Dallas area to the airport. By 1990 the volume will increase to 54,000 trips per day and the fuel saving would be 4.5 million gallons per year.

And second, if we were able to double mass transit ridership in the next 20 years, urban automobile use would only be reduced from 95 percent of urban passenger trips to about 94 percent. We should do all we can to promote the use of public transportation. But -- according to the Highway Users Federation -- only one half of one percent of the petroleum we use goes to automobiles commuting to central business districts.

We find it incredible that the Administration would propose -- and that anyone would seriously consider -- the dissolution of the Highway Trust Fund.

Governor Dolph Briscoe expressed the feelings of most Texans in a statement July 10, 1975 vigorously opposing the Administration proposal. I am attaching this statement as Exhibit "C".

At its Annual Meeting June 18, 1975 the Texas Good Roads/Transportation Association adopted a resolution urging the extension of the Highway Trust Fund. I am attaching a copy of the resolution as Exhibit "D".

12/U. S. Senate Testimony

We respectfully urge the Subcommittee to act favorably and at the earliest possible date on a highway bill which

- a. Extends the Highway Trust Fund indefinitely
- b. Continues the dedication of all existing Federal highway user taxes to the Highway Trust Fund
- c. Increases annual authorizations to the states to the maximum amount the Highway Trust Fund will support.

Thank you, Mr. Chairman and members of the Subcommittee, for giving us this opportunity to express our views on this important subject. We in Texas are extremely proud of your leadership in the search for solutions to our transportation problems. We have great respect for you and are confident the decisions you are about to make will serve the best interests of the people of our state and nation.

Exhibit "A"

BETTER ROADS AND
TRANSPORTATION COUNCILPolicy Statement

Adopted
Nashville, Tennessee
July 31, 1974

1. Complete the Interstate system as soon as possible to bring its proven economic and life-saving benefits to bear on the constantly growing transportation needs of urban and rural areas. Present funding levels are inadequate to accomplish this goal. Interstate authorizations should be at least \$4 billion per year. States exercising initiative in the completion of Interstate mileage should be encouraged to do so.
2. Increase substantially the rural primary and secondary program authorizations to amounts no less than the totals for urban highways and mass transportation assistance. It is the long-neglected primary and secondary roads which are in the least satisfactory condition for safe and efficient movement of people, goods and farm production -- and this is where the highest accident, fatality and injury rates are experienced.
3. Provide a funding level of at least \$2 billion annually from general revenue for mass transportation. Establish an equitable formula for distribution of the funds to the states.
4. Launch an intensive program to bring substantial early relief to urban traffic congestion. Such a program should include improved management of transportation facilities; completion of planned freeways, ring roads, and improvement of arterial streets; greater use of public transportation and carpools; and use of highway funds for bus lanes on freeways, passenger shelters, parking areas and electronic controls.
5. Provide for continuity of funding in highway and mass transportation programs. The full amount of funds authorized by Congress should be made available to the states without administrative impoundment. Red tape should be eliminated. Categories should be reduced and the

states should be given maximum flexibility in the application of funds to meet their respective needs.

6. The Highway Trust Fund should be continued beyond the 1977 expiration date and total authorizations for highway improvements should be increased to fully utilize revenues generated by highway user taxes.

7. Increase funds available for replacement of obsolete and hazardous bridges and for elimination of highway-rail crossings at grade.

8. A national transportation policy should be established for the cooperative development of all transportation modes to their optimum potential. The Federal government should be involved only in programs of national significance. A broader responsibility for state and local governments and private enterprise should be encouraged.

9. Highway and transportation programs should be translated into human needs. The primary goal should always be to improve the quality of life of the American people. With the completion of the Interstate system, consideration should be given to two other major programs:

- a. economic development roads to create new jobs and support dispersal of population.

- b. parkways and scenic roads to provide for the recreational needs of a growing population.

10. Highway and transportation programs should support energy conservation and environmental goals.



Exhibit "B"

COMMISSION

REAGAN HOUSTON, CHAIRMAN
DEWITT C. GREER
CHARLES E. SIMONS

STATE DEPARTMENT OF HIGHWAYS
AND PUBLIC TRANSPORTATION

AUSTIN, TEXAS 78701

July 3, 1975

ENGINEER DIRECTOR
B. L. DEBERRY

Honorable Jas. C. (Jim) Wright, Jr.
Member of Congress
Washington, D. C. 20515

IN REPLY REFER TO
FILE NO.

Dear Congressman Wright:

At our June meeting, the State Highway and Public Transportation Commission and staff discussed at length the Department's present and projected financial condition in relation to short-term and long-range planning and funding.

The Department is presently in a very critical financial situation brought about primarily by inflationary costs of contract construction projects, salaries and materials for maintenance and operation of the Department. We are now operating under a "no-hire" policy to reduce our construction personnel and reduce our operating costs. It is our hope that these can be brought to an acceptable level through attrition of our employees and that actual layoff of personnel will be minimal in the coming months.

Our construction program for the remainder of this year and next year must be restricted primarily to Federal-aid projects to utilize available State funds to maximum advantage and maintain our State cash flow balance within an acceptable range.

Texas has obligated 75% of all funds apportioned to the State under provisions of the 1973 Federal-aid Highway Act. For the Department to continue with even a reduced amount of construction work, it is imperative that we have a firm commitment for funding from future Federal-aid programs at the earliest possible time.

We believe it is of utmost importance that the Highway Trust Fund be continued to give us an assured flow of Federal funds to permit long-range planning which is so necessary in the transportation area; and that a new Federal-aid Highway Act be passed at the earliest possible time, maintaining our long-standing Federal-State relationship, and enable us to continue with our short-range programs.

These two actions would permit this State to maintain a minimum transportation program in the highway area. Efforts on your part in helping achieve these two measures will contribute greatly to the improvement of the transportation program in Texas.

Your continued support of an adequate transportation system for the State of Texas and the Nation is appreciated.

Dewitt C. Greer
Member

Charles E. Simons
Member

Sincerely yours,

Reagan Houston
Chairman

B. L. DeBerry
Engineer-Director

Statement, Governor Dolph Briscoe
On Highway Trust Fund
July 10, 1975

Exhibit "C"

I am opposed to President Ford's proposed Federal Highway Act of 1975, which was sent to the Congress earlier this week. Under the President's proposal, the National Highway Trust Fund would be broken up for the first time, with the four cents a gallon tax being split three ways: one cent to the highway trust fund, two cents to the Federal General Revenue Fund, and one cent tentatively given back to the states.

A state as large and as complex as Texas survives and prospers by its highway system. Since 1917, we have been working toward creating the finest highway system in the nation and while we are well along towards that goal, much yet needs to be done. I feel that the National Highway Trust Fund is still vital to the nation and to Texas and I cannot support the President's suggestion that it be abolished.

The gasoline tax has traditionally been a state source of revenue. Texas was the second state in the Union to pass a gasoline tax in 1917. When the highway trust fund was created in the 1950's, it was understood that the revenue would remain dedicated for the construction of a national system of transportation, and when that goal was completed, the revenue source would be returned to the states. The Administration's offer of returning one cent to the states covers up their attempt to move two cents into the Federal treasury and away from the needs of states.

The President also proposed Federal assumption of interstate system maintenance to offset in part the loss to states from the dissolution of the trust fund. We are not forced to depend on the Federal government for interstate maintenance in Texas and I am informed by the Texas Department of Highways and Public Transportation that the department would prefer to maintain such highways in the State.

My concern is that the nation not start on the path toward a fragmented national transportation system. I think that other parts of the country need to understand the unique transportation requirements of a state like Texas and understand how those requirements affect the food that reaches their tables, the clothes they wear and the energy they consume.

I have asked my Washington office to convey my opposition to our congressional delegation and to the President. It is my hope that the trust fund will remain intact.

Exhibit "D"

Resolution 1

HIGHWAY TRUST FUND

The Highway Trust Fund, established in 1956 to pay for the Interstate System, has enabled us to build the greatest highway system the world has ever known on a pay-as-you-go principle without a dollar of federal debt.

This accomplishment is unparalleled in federal government programs.

In addition to being a financial success, the Trust Fund has encouraged free enterprise and recognized the role of state and local governments. It has paid for the greatest public works undertaking in the history of man.

The Highway Trust Fund is due to expire in 1977 unless extended by Congressional action. After 1977 the highway program would no longer have assured financing. Future funding would have to be voted by Congress from the general fund.

The concept of the Highway Trust Fund has been understood and accepted by highway users. It should be continued.

The dedication of the gasoline tax to highways has been successful because it makes sense. As a general revenue tax it is regressive -- falling heavily on those at the lower end of the economic spectrum. As a user tax, where people pay according to the benefits received, it is plainly equitable.

To finish the Interstate job and continue the support of other necessary roads, the Highway Trust Fund concept remains the soundest.

Resolution adopted at
43rd Annual Meeting
Texas Good Roads/Transportation Association
June 18, 1975
Austin, Texas

Senator GRAVEL [presiding]. Our next witness will be the Hon. Walter Parker, highway commissioner for the State of Alaska.

Commissioner, the floor is yours. You may present your testimony as you wish. I understand you have some visual aids that you want to use, and that will, of course, be allowed.

STATEMENT OF WALTER PARKER, COMMISSIONER, ALASKA DEPARTMENT OF HIGHWAYS, ACCOMPANIED BY MR. SHUMWAY, STATE HIGHWAY ENGINEER

Mr. PARKER. Mr. Chairman, thank you for the opportunity to testify on S. 2071, to authorize appropriations for the repair of highways in the State of Alaska and for other purposes.

I have a lengthy prepared testimony. We have also brought a video tape showing the damage to the highways which we can run, if you so desire.

Senator GRAVEL. Yes, I would like to see that.

Mr. PARKER. We can start with that. Unfortunately, we lost the voice on this tape sometime when we were demonstrating it yesterday. We will narrate it as we go. The tape is being set up by our State highway engineer, who I brought to answer any questions on this. We have been working on this for several months, since the damage first became apparent.

Senator GRAVEL. Maybe for Senator Stafford's benefit, could you just give us a quick overview of the problem and tell us how the video tape that we are going to see would relate to that? Could you also turn the video tape a little more so Senator Stafford can see it?

I appreciate the audience's interest in this. But Senator Stafford will be voting on it and not the audience. I am more concerned with educating Senator Stafford.

Mr. PARKER. Mr. Chairman, as you are aware, the major construction on the Alaska pipeline began last year and intensive construction did not begin until this spring. As soon as the snow left the roads this spring and the roads began to enter into their normal break up condition, it became apparent that we had a situation which we had never experienced before. The roads were literally disintegrating before our eyes.

After doing a good deal of quick research on the problem, it was obvious that during the winter, the continual truck traffic over the brittle pavements had in large part destroyed the driving surface on some sections and was continuing to do so. This is what we are going to demonstrate with the video tape first, and then I will expand on it in my later testimony.

Mr. Chairman, that is where we lost the voice. As the narrator was about to continue, the roads are being impacted by 300 to 400 heavy truck movements daily and this number is accelerating as pipeline construction accelerates and we may see movements of 700 to 800 trucks a day over these roads. You are getting the same wear and tear in the roads in one season now that we used to experience in eight seasons.

What they are showing you now is simply the beginning of the Richardson Highway at Valdez and soon will be moving out on the road and showing what is happening to them. The traffic that you will

be seeing is primarily of not only the pipes, the trucks moving the loads of pipe, but substantially most of the traffic is moved on flatbed trucks like this one.

You can see now, he is passing over a stretch of road. This is at mile 30 on the Richardson Highway. That is the type of break up that we first began to notice last spring, almost immediately as soon as the surface of the roads began to thaw.

Senator STAFFORD. What sort of a road surface is that?

Mr. PARKER. In this area, this is what we normally use for our road surfacing which is an inch and a half of asphalt pavement. We have used the inch and a half of interim paving for many years. It is the way we have handled our roads.

Senator STAFFORD. What do you have under it?

Mr. PARKER. That is one of the problems, the base and subgrade varies intensely. The area you are seeing now, part of this is the old section of the Richardson which was constructed in the 1940's and 1950's, very minimal standards. In other areas where we had reconstruction, it stood up well and in some areas, they didn't stand up so well.

You can see now, this is an area where we have substantially had to blade off the entire driving surface and convert it to a gravel road which creates this other problem, the big trucks stir up an inordinate amount of dust and create a hazardous condition for the rest of the driving public and for themselves, too, of course.

What you are looking at now, a few months before was a paved highway. The 22-foot driving width which is, of course, very narrow, but that was the standard in the days when this particular part of the road was built. Here is where they are ripping up the broken pavement in order to blade off the road which was our only expedient available at the time.

Senator GRAVEL. Why did you do that? So you wouldn't have to fill up the ruts?

Mr. PARKER. Because the holes were developing in the driving surface, were very dangerous. They were throwing trucks. It is just safer at this time, where the surface reaches a point where we simply can't patch asphalt any longer, to get rid of the entire driving surface. It was a case of doing that or continuing with a very dangerous road.

Senator GRAVEL. How much of that have you done so far, ripping it off. In other words, returning to gravel roads from paved roads?

Mr. PARKER. Approximately 30 miles so far.

Senator GRAVEL. How much of the highway system do you estimate will have been degraded by the time the pipeline is finished?

Mr. PARKER. There is a chance that we would be facing up to 300 miles of returning formerly paved surfaces to gravel at our present estimate.

Here is one of the pipe trucks. They move three sections of 80-foot double-jointed pipe out at a time under ideal conditions when the load limits let them. When the roads began to enter into their normal breakup period, we reduced them first to two sections of pipe into one section of pipe.

We imposed our normal load limits this spring which, of course, had the effect of substantially slowing down our pipeline construction. But

there wasn't any real choice in that matter because it was the only way we could save the highway surface.

If you like now, Mr. Chairman, I will go into my prepared testimony.

Senator GRAVEL. All right.

Mr. PARKER. When the Alaska pipeline project was in its conceptual stages, it was soon realized that there would be a great impact on the State highway system. We did begin to prepare for this. Plans were made for traffic control and steps were taken to insure that true cooperative measures with the pipeline service company extraordinary maintenance related totally to pipeline would be provided.

What was not foreseen was that the highways themselves, built on the standards employed on Alaskan highways in the past would simply not support the continuous heavy traffic which has resulted from the Alyeska project. A tremendous upsurge in traffic at critical locations within the State has occurred since the initiation of the pipeline project. This is dramatically illustrated by increases in the percentages of total vehicles and especially heavy trucks utilizing the border station at Tok, Alaska.

The average annual traffic has increased 112 percent in 1975, as compared to the 1971 figure, a little over doubling, and the percentage of trucks has increased by over 600 percent. The majority of these trucks were heavily loaded with equipment and supplies for the Alyeska project.

On the Richardson Highway, which parallels the pipeline from Valdez to Fairbanks, traffic has increased more than 30 percent since 1974. The compelling figure here is that almost all of this increase is in truck traffic.

The ports of Seward, Anchorage, and Haines are also showing dramatic increases in total vehicles and percentage of trucks. Our total tonnage hauled across the highways has increased greatly.

The border station at Tok, the tonnage increases of 800 percent have occurred in comparing our early 1975 figures to our 1972-73 data and the average weight per truck has increased from 23 to 32 tons.

The above increases have had a tremendous impact on our new highways which are expected to give 7 to 8 more years of good service and have simply disintegrated under this impact. Older segments of the system have suffered the same impact.

We are rapidly regressing to the point we were 30 years ago when the State's highway system was largely gravel surfaced.

The above increases in traffic are related only to the Alaska oil pipeline. The State is also facing in the next 5-year period: the Alaska gas pipeline, the project which may cost more than the oil pipeline, Outer Continental Shelf oil development presently proposed by the Federal administration, naval petroleum reserve for exploration and possible development plus increasing level of exploration on other offshore areas for both oil and minerals.

The Alyeska project is a \$6.3 billion project at the present. Every dollar of that results in some further use of the highway system. If all of the energy projects just enumerated go forward, we are looking at an expenditure of somewhere between \$10 and \$20 billion in addition to the oil pipeline in the next 5 years.

This, of course, can result in a doubling or tripling of the present truck traffic or increase of 14 to 21 times that which we experienced in 1971, which we regard as our last somewhat normal year for truck traffic.

In addition to this, the regular highway traffic will increase substantially, due to the high level of activity and population increase.

The national interest in the Alaska pipeline has been clearly expressed by the President and the Congress and national interest in the other Alaska energy projects is being developed at a rapidly increasing pace.

The State of Alaska and its various departments must implement a large part of this policy on a continuing basis.

In the Department of Highways we are carrying forward with the same resources substantially as existed in 1971. Our only increase has been those caused by inflation and men and material are handling it with the same number and we are handling a program with over double the previous magnitude and one that threatens to grow and accelerate as the energy programs multiply.

We have already enumerated on the film how the freight flows into Alaska. The Alaska Railroad is able to accommodate freight from Whittier, which has no highway connection, and part of the freight from Seward and Anchorage, but the rail load can distribute the cargo only as far as Fairbanks and from there on it goes on the highways.

I would like to give you a very brief history of the Alaska highway system since statehood in 1958, so that you may fully understand how we arrive at our present situation.

The Alaska highway system was originally constructed by the Bureau of Public Roads and the Federal Alaska Road Commission to the minimal standards that were necessary at that time in 1940 and 1950.

The Federal Government policy was to build as much paved road as possible with limited budgets provided to the territory of Alaska.

In some cases, lesser quality materials were used, such as native logs for corduroy roads. Most of these highways achieved their intended design life of 10 to 15 years with a normal amount of maintenance.

Certain sections have been reconstructed to higher Federal-aid standards as traffic demands and funds allowed. Thus, through the 15 years since statehood, the State of Alaska has been faced with trying to maintain a reasonable level of quality in the existing highway system while still meeting the needs of an expanding population and economy by constructing needed additional highways.

In 1964, all of this was stopped by the Good Friday earthquake. All of the resources of the State were used to recover the earthquake losses during the subsequent 3-year rebuilding program.

In 1966, 300 miles of paving were placed on selected portions of the existing highway system to extend its useful life. This has provided many more years of adequate service to the traveling public and reduced the maintenance cost over the same period. This is the paving that is beginning to really suffer the worst deterioration now.

Since 1970, as I said before, we have attempted to anticipate the needs and plan for the construction demands of the trans-Alaska pipeline on the highway system.

During that period from 1970 to present, we have seen our construction dollars shrunk 50 percent by inflation. This has created unusual problems for us since construction costs always run from 25 to 40 percent above construction costs for the rest of the country.

In 1974, the legislation was passed which allowed the pipeline construction to begin. With a need to complete the pipeline and get the oil flowing in the shortest time, the oil industry has been required to obtain materials and supplies from all over the world and ship them to the worksite by any means available.

This has put this unexpected burden on our transportation facilities and because we have the capacity to expand quickly, to accommodate the traffic, of course we have been called to take the brunt of the increased volume.

The Alaskan highways, as I said before, are built to minimum paving standards and they have simply been unable to take this increased load. We are now faced with the possibility of having all the highways in the State reduced to a gravel surface because of the lack of funds.

We believe it is in the national interest for the Congress to recognize and assist Alaska by providing special funds for our use during the period of pipeline construction.

We could, of course, simply let the paving deteriorate and revert to gravel highways. However, if we do this, we are not looking at just 1 or 2 years, but possibly 7, 8 or 10 years of driving on gravel surfaces. Even then, the costs of maintaining the road surface will remain as will the potential for increased accidents due to dust problems.

In order to keep the gravel highways north of Fairbanks open to traffic supporting the Alyeska project, north of Fairbanks, all of the traffic is construction traffic and there we have a bad advantage.

We must operate massive grader fleets on a continuing basis in addition to the other road maintenance necessary to maintain a good gravel surface. In short, we are finding our greatly increased costs in road maintenance because of the truck traffic at the level we are experiencing whether the surface is paved or gravel.

We have several reasons for avoiding the alternative of gravel highways. For instance, travel on paved highways is much safer primarily because of better dust control. On the primary highways, we must accommodate not only the great increases in truck traffic, but also the constantly increasing numbers of tourists and other visitors to the State who are being attracted by our comparable scenery, but more important, by the tremendous activity that is going on in the north at present.

The part of the primary highway system that is impacted by pipeline traffic serves 83 percent of the resident population of the State.

Because of these factors and many others, we have concluded that the alternative of allowing roads to revert to gravel surface during this period is not a good one. When considering existing Federal highway guidelines and the past policies of the Federal Government and

the State in conjunction with recent court decisions regarding the State responsibilities on liability, it is an alternative that is not really practically available to us.

What we are facing is that we have to keep these road surfaces up to some reasonable standard during this period of heavy impact. This means going back on many stretches over and over again with whatever means is available, whether that be seal coating, interim paving, or reconstruction. Certainly we will continue with the reconstruction of the highways at the same level that we were in the past. But this is only a very small incremental part of our road system that is reconstructed every year.

We also have to increase our level of both summer and winter maintenance to meet the demands of those who are driving the trucks. Last winter safety meetings were called by the truckdrivers who would not accept the previous level of State winter maintenance as acceptable to present conditions.

As a result, maintenance costs on the Elliott Highway increased by 300 percent to resolve the safety problems. The same situation will occur as the roads continue to deteriorate.

It must be recognized that total reconstruction cannot be accomplished at this time. We must keep the existing surface in as good a condition as possible during the period of maximum utilization.

This will allow pipeline construction to proceed without delay due to road conditions.

Therefore, any funds made available for the next 1 to 2 years must be used to prevent the total surface destruction of the existing highways. This would involve spot drainage problems, strengthening of the base where required, special maintenance, correction of substandard alinement where possible within the existing rights-of-way, and the repaving or seal coating of many miles of existing highway.

The question that naturally arises concerns the highway department's ability to absorb this much funding during the forthcoming impact area. I think we proved this point during the past year when we obligated more than \$75 million above our normal obligation as a result of the President's release of the \$2 billion in impounded funds.

The Alaska construction industry, with some help from contractors from the west coast, was able to respond to this more than 100-percent increase in highway construction from the previous year with no dilution of the competitive bidding process.

It is not the slightest doubt in any mind that we will be able to utilize the requested increase in funding authorization with no diminution of quality.

The work that needs to be done must be accomplished without interrupting our normal highway program. We must prevent the State of Alaska from falling further behind in the necessary upgrading of the highway system mainly because we have got to meet those population and resource development demands that can be expected in the coming years.

These are going to have, I think, far greater impact than we dream of, in addition to the truck traffic. The highway system is still the nerve system of the States, the primary means of surface communication, 85 percent of the population and this role is something that is going to be increased.

The \$70 million that we are requesting for the forthcoming year in additional funds will not add 1 mile to the existing Alaska highway system. We must have these funds to maintain the existing primary highway system in a condition suitable for the movements of large amounts of freight that will be necessary to meet the demands of the energy-related projects I have just outlined.

These projects are going to, and of themselves, develop needs in addition to the highway system which must be met out of our existing obligational authority. Even assuming that the natural gas and oil developments on the Outer Continental Shelves can be handled by the utilization of the existing primary system, there are already projects underway in Alaska, such as the liquified natural gas developing on the Kenai Peninsula which will create needs for extension of existing system.

These needs must be met out of our existing program. Major needs will be generated by the influx of new people into the State which is about on a 10 percent per year increase now; influx to these projects themselves will create.

Senator GRAVEL. Let me interrupt you here. We will recess for a few moments so that I may go to the floor for a vote. Make yourself comfortable and I will be back shortly.

[Brief recess.]

Senator GRAVEL. Thank you very much, Commissioner. We will go back on the record now and you may continue.

Mr. PARKER. Mr. Chairman, our existing appropriation is going to be stretched to the limit by the new needs that are being generated by the energy projects. A good part of these needs are going to be in the urban areas where the arterials and limited-access highways serving these areas must be expanded so that the managerial and technical personnel for all of these projects who largely live in Anchorage and Fairbanks and can get back and forth to the airport and to work.

That is probably the most critical thing we are facing right now. In pipeline construction, there is this kind of strangulation of flow of personnel and goods. People can't get from here to there.

Unfortunately, under the new Federal-Aid Highway Act presented by the administration, we seem to have lost our Alaska Assistance Funds. As many are aware, we have utilized these funds as an integral part of our highway construction program, including the special authorization for the Marine Highway system, which we have always regarded as an integral part of our total highway system.

Even with the Alaska Assistance Funds we have been able to accomplish very little new construction in the State. A few new lane miles with most of those being in the major urban areas. Without Alaska Assistance Funds, we will have a much more difficult time even maintaining the status quo on our primary system, including the Marine Highway.

It is only through the availability of these funds that we have been able to partially meet the needs in Alaska, to expand the Marine Highway system to the small communities in southeastern Alaska and to finance the major urban projects. Without them we will simply revert to a position where we can barely maintain the present level of service by rehabilitating the existing primary and secondary system.

In our last budget year, we spent some \$144 million on maintenance, administration, and capital construction in the Department of Highways. Based on existing costs and on a life-cycle construction program, this amount was just enough to keep us even with traffic we could reasonably anticipate. New construction projects in that budget, amounting to some \$28 million, were possible only by allowing \$28 million of deferred reconstruction and rehabilitation of the highway system to go by the board for another year.

I would like to point out at this time that the position on Alaska assistance funds on the equity for the State of Alaska in having these funds in lieu of interstate funds has been supported by the Federal Highway Administration and also by our sister States as representing the American Society of Highway and Transportation Officials.

With special pipeline impact funds of \$70 million, and the restoration of the Alaska assistance funds in the amount of \$20 million for 1976, we believe that the Alaska highways can be maintained and provide good service to the traveling public and to provide the base for the development of the Nation's energy programs centered in Alaska for the next 5 years.

At the end of that period, we will hopefully be in financial position to proceed with a plan for orderly reconstruction of the primary highway system to new standards that will be necessary to meet the new levels of activity.

Senator GRAVEL. Thank you, Commissioner Parker.

Senator Stafford had to absent himself. He will have some questions. We will pose them to you and the record will be open so you can answer them in writing. You will be allowed time to answer his questions and to submit any additional material you might want to offer in that regard.

[The question and the response follow:]

AUGUST 5, 1975.

HON. LLOYD BENTSEN,

U.S. Senator, Chairman, Subcommittee on Transportation, Committee on Public Works, Washington, D.C.

DEAR MR. CHAIRMAN: At the hearing on S. 2071 on July 31, 1975, the following question was put to me in writing by Senator Stafford:

Mr. Parker, an article in last Sunday's *New York Times Magazine* reports that royalties to the State of Alaska from oil, once production starts, will amount to approximately \$1 billion per year for 20 years. Has any thought been given to seeking a federal loan to reconstruct the highways to be repaid out of a portion of the royalties?

I request that this reply to Senator Stafford's question be included in the hearing record:

When the State of Alaska begins to receive its full revenues from the Prudhoe Bay oil field it will be faced with a whole new range of expenses both on shore and off shore generated by the energy program being implemented to meet the nation's energy needs in the 1980s and 1990s. It will at that time be faced with a continuing expense of a transportation system that has been expanded to meet the needs of those programs in addition to all of the other governmental costs associated with such programs.

The monies requested in S. 2071 are to meet needs brought on by the National Energy Programs, the Alaska oil pipeline in this case, and reflect the fact that the State is securing no compensation in tax revenues from those programs that is in any way commensurate with their impact. We are already operating a \$300 million deficit which is financed from the remains of the Prudhoe Bay lease sales. This deficit promises to grow greater in the next three years. Indeed, State revenues from production of North Slope oil

resources which were once considered to be "surplus" will now be largely claimed by State operating programs. These programs have grown as a direct result of the energy program both in real terms by meeting new service requirements and indirectly through the accelerated inflation caused by the rapid development of our resources.

If we must pay back these advance loans in addition to meeting future needs the State will be in a position where it is expending its patrimony in natural resources solely to meet national needs and having little left to improve the quality of life for its citizens. We feel that we are already contributing more than our fair share in supporting these programs and ask that at least during those years when our deficits are so extreme that the Congress recognize the great impact that these energy programs are having on the State as reflected in the damage to the highway system.

I wish to thank you and the subcommittee for your consideration in hearing our testimony and viewing our exhibits. We will, of course, promptly answer any other questions which subcommittee members may wish to submit to us.

Sincerely yours,

WALTER B. PARKER,
Commissioner of Highways.

Senator GRAVEL. Have you discussed the road damage problem with the Federal highway people in Alaska and here in Washington? What has been their indication of recognition with respect to Federal responsibility?

Mr. PARKER. Yes, Mr. Chairman. We have had several discussions with Federal highway officials in Alaska in their regional office and with the Federal Highway Administrator here in Washington. He has been most receptive to our problem. They accept the problem. They are conducting an ongoing study of it themselves, a good part of which I am sure will substantiate what we have brought before you today.

Senator GRAVEL. They feel the damage to the highway caused by the pipeline is a Federal responsibility?

Mr. PARKER. Yes; they have so indicated.

Senator GRAVEL. If you hadn't had the impact of the pipeline traffic, would the State have been able to handle the maintenance and improvement of the present road system?

Mr. PARKER. Yes, sir, Mr. Chairman. We would have been able to continue our maintenance at past levels. The State maintenance budget increased from \$24 million to \$29 million this year, which was a maintenance level budget. The extra increase largely recognizes inflationary costs.

Senator GRAVEL. If the Federal Government does not provide funds to at least maintain the gravel roads that we already had, does the State of Alaska have any alternate means of special funding?

Mr. PARKER. Mr. Chairman, not really. Our probable alternative would be to approach those people involved in the construction of the Alyeska Pipeline Service Co. However, as I pointed out earlier, they are not the only ones involved now. We have many other energy projects coming along, all of which are beginning to impact. The impact of the Outer Continental Shelf development is already existing in the State and creating new activity.

So the only reason we would approach Alyeska is they are the one with money at the moment. They are easily identified. They have been most receptive in providing maintenance funds where it is clearly an identified pipeline-only need. Now we are talking about the primary highway system out of Fairbanks.

There you have all the users of the highway system involved and it would be very difficult to break out even though we can identify at this particular moment Alyeska as a major user. Certainly, there are many other users involved here.

Senator GRAVEL. If you adopted stringent standards to protect the highways of Alaska and the people of Alaska, what impact would this have on the construction program of the pipeline?

Mr. PARKER. It would necessarily have to delay it, mainly by reduction in speed limits and a reduction in weight limits because if you are unable to put the money into highway maintenance, necessarily you have to reduce the driving relations to meet the quality of the highway. The quality of the highway would be very low.

Senator GRAVEL. Commissioner, I appreciate your testimony very much. I think the part describing the roadway system of Alaska traces that development well and underscores that all parts of it are impacted by the pipeline project. The parts you showed depicting traffic and the road conditions provide excellent evidence of the extent of deterioration.

If that whole thing could be done in a 5-minute presentation, I think it would be very valuable to the committee at the proper time.

Mr. PARKER. Thank you, Mr. Chairman.

Senator GRAVEL. Thank you for your presence here.

Our next witness is the Honorable Richard McGrath, representative of the State of Massachusetts.

STATEMENT OF HON. RICHARD McGRATH, REPRESENTATIVE, STATE OF MASSACHUSETTS

Senator GRAVEL. The floor is yours. You proceed as you feel most comfortable.

Mr. McGRATH. Thank you very much, Senator.

Mr. Chairman, I am State Representative Richard M. McGrath of Watertown, Mass., a State appointed chairman of the special commission investigating bridges, highways, and truck overloading.

I want to thank this honorable committee for allowing me this opportunity to personally appear and present testimony and evidence concerning the singlemost important highway safety problem facing the States, my State, the Nation, and Congress—simply and purely bridge safety.

In my commission's 2-year ongoing study in depth, in accordance with our mandate and supported by our department of public works and our department of State police and field investigation, it is disclosed to us that unless we, in the Commonwealth, initiate a massive crash program, we will see collapsing of bridges, loss of lives, and massive closings, much like a domino effect occurring in the next 30 years.

In support of this, Mr. Chairman, I would like to submit, as I leave, with this committee, my commission's March 1974, bridge catalog, and our preliminary bridge program of April 1974.

[Retained in committee files.]

Senator GRAVEL. Without objection.

Mr. McGRATH. Mr. Chairman, my sole purpose in coming here is not just to advise this Congress of my State's investigation and our \$1 billion nightmare facing us. But as we heard from the gentleman from

Texas and their \$1.5 billion nightmare, our preliminary investigation indicates that unless Congress leads the way to do something about the more than one-half million bridges existing that we will have a national crisis on bridges.

Mr. Chairman, it is not too difficult to understand how and why the Nation has arrived in this crisis. A bridge has a life design span of 50 years. I wonder how many Members of Congress know how many bridges exist in the United States of America that are over 50 years of age.

All one has to do is look at the railroad expansion in the United States and you can safely conclude that more than 70 percent of them were built in the 1800's. They are wooden decked, single steel girder bridges. These bridges in our State alone have resulted in tragic accidents, one in which we were successful in averting a derailment of a liner headed to New York City with 340 passengers. Again an old decrepit railroad bridge.

Mr. Chairman, it will take Congress, if it follows its past bridge programs 300 years to just bring substandard, deficient bridges up to standards of the 20th century. I submit, Mr. Chairman, the Nation cannot wait to start seeing massive bridge closings, enormous energy costs increases because of detours and the inconvenience to the general public if it can tolerate that type of a time schedule to bring our bridges into reality.

The Congress each year has received a Federal Department of Transportation report, usually rendered in December of each year, on the Federal bridge inventory program that Congress started itself in 1969.

Mr. Chairman, December of 1974's report advised Congress that on the Federal-Aid System there are 32,000—32,000, Mr. Chairman, 420—deficient substandard bridges on the Federal-Aid System and that if we had the money today and at today's costs without escalating construction costs, it would cost \$10.4 billion to bring those 32,000 bridges up to standard.

That report, Mr. Chairman, further reports that there is another 45,000 bridges bearing watching that will have to be replaced in the future at an approximate \$20-something billion.

These, Mr. Chairman, are bridges built since the 1956 Federal Highway Act. Consider the bridges built prior, and there are more in this Nation than 180,000 that certainly were built after 1935 and before 1956. Of those, there are over 100,000 in the critical condition.

Mr. Chairman, a \$50 billion nightmare at today's bridges ignored by Congress, escalating at a 10- to 20-percent cost increase over the coming years could mean no crash program enacted today. We are talking about a \$100 billion nightmare, let alone loss of lives in the area of public safety.

With that in mind, Mr. Chairman, I have come here today to ask this committee to investigate the evidence I leave behind, to consider a national crash program on highway bridge reconstruction and to commit \$500 million in this year's Federal Highway Act to just inspect, rate, and post all of their bridges on and off the Federal System so that Congress some time in the next year or two can really see this national disaster that is fast approaching us.

Two, to enact Federal legislation to drastically reduce the time-consuming schedules that now, as of today, require our major bridges to go through an 8- to 10-year program, 102-step procedure just to rebuild a bridge.

Three, Mr. Chairman, I ask this committee to most seriously consider the commitment of at least \$3 billion to \$4 billion annually until all of the Nation's 563,500 bridges are brought up to the 20th century standards.

I would like to leave also in evidence pictures from our State police department done over the last 2 years, showing how serious the rotten railroad bridge conditions in our State are and ask this committee to consider inquiring of all of the other 49 States if their problems are as ours is.

From what I have seen in New York, New Hampshire, Maine, Connecticut, and New Jersey, I am certain that this committee will suddenly realize the crises I am talking about is not in error. It is a reality. When it is upon us, unfortunately, Mr. Chairman, we will begin acting on a crisis basis, but with this type of a problem, it requires so much leadtime, we will never be able to solve it and help the Nation.

Senator GRAVEL. Thank you, very much, Representative McGrath.

We appreciate your testimony and we appreciate the good work you have done for Massachusetts and I am sure for the Nation.

[Mr. McGrath's prepared statement follows:]



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Chairman
Special Overload Commission
Committee on
Public Safety
Federal Financial Assistance
STATE HOUSE OFFICE
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PREPARED STATEMENT BEFORE THE SENATE COMMITTEE ON PUBLIC WORKS-ROOM 4200
DIRKSEN SENATE OFFICE BUILDING, WASHINGTON D.C.-7/31/75-9:00 A.M.

Mr. Chairman, I am State Representative Richard M. McGrath of Watertown, Massachusetts and I appear here, today, in my capacity as Chairman of the Special Overload Commission created by the General Court of the Commonwealth of Massachusetts in April, 1973 to investigate and study the problems of truck overloading, highways, bridges, etc.

I want to thank this Honorable Committee for allowing me this opportunity to personally appear and present testimony and evidence concerning the single most important highway safety problem facing the states, the nation and Congress - Bridges:

In my Commission's ongoing 2-plus year study, we have uncovered an unbelievable, catastrophic bridge nightmare which has already started to result in closings and collapses of bridges within the Commonwealth and will most certainly escalate unless we initiate a massive Crash-Program of Inspection, Rating, Repairing and Reconstruction involving 2,400 of the Commonwealth's 5,160 bridges. In support of this I would like to leave with you, Mr. Chairman, copies of my Commission's 3/74 Bridge Catalog and the Mass. D.P.W.'s Preliminary Bridge Program of 4/74.

My sole purpose in travelling to Washington D.C. and appearing before this honorable Committee is to bring factual evidence of the \$1 Billion Dollar bridge nightmare facing the Commonwealth and I am sure an estimated \$50 Billion Dollar bridge nightmare facing the nation before this Congress makes any final decision on the future of the Federal Highway Fund and to hopefully avoid future bridge collapsings, closings with loss of lives and increased energy costs due to costly detours!

Congress and the states can no longer ignore the warnings contained in the "Annual Reports to Congress" entitled "Special Bridge Replacement Program" prepared by the Bridge Division, Office of Engineering, Federal Highway Administration, U.S. Department of Transportation and rendered each year since 1971! A thorough reading of these and a request of reports on all bridges from the respective states will most certainly reveal that a national calamity on bridge failures and closings is fast approaching reality and that a National Crash-Program on bridge repair and replacement is the only way that tragic, costly happening can be avoided! Even then it will conservatively take an estimated 20 to 30 years to complete such an awesome task and undertaking.

This honorable Committee must realize that all bridges by design have a life span of 50 years and that more than half of the 563,500 bridges in the United States exceed that life span! Further, the DOT estimates of numbers of deficient bridges has grown by leaps and bounds as the National Bridge Inspection Program (NBIP) receives more information from the states. For example, the NBIP as of 12/74

had a file of some 230,000 bridges on the Federal-Aid System and updated its earlier estimates of 24,000 deficient bridges to 32,420 deficient bridges at a conservative cost estimated at \$10.4 billion dollars! Additionally, the 12.74 DOT states: "There is still another group of some 45,720 bridges which bear careful watching as they are rapidly becoming functionally obsolete! If one adds the more than 100,000 bridges off the Federal-Aid System which are estimated as deficient, one should begin to realize the gigantic problem facing the nation. Someone must act NOW to head-off this national disaster!"

Human lives, energy conservation and usable highways and roads should be the dominant theme of this year's Federal Highway Act. Highways and roads are useless if their bridges are not safe or usable.

Mr. Chairman, I submit that most, if not all of the states, need immediate help to accomplish an effective National Crash-Program on bridges in the following form:

1. 1/2 Billion Dollars to inspect, rate and post all of their Bridges (On and Off the Federal Aid System).
 - a. Massachusetts' needs \$10 Million to use on 2,400 bridges alone.
2. Federal and State legislation drastically reducing the time schedule which must be followed to repair, reconstruct or construct a new bridge.
 - a. Today's standards and laws dictate minimums on small, minor bridges of 3-4 years and on larger, major bridges of 8-10 years!

3. Federal Commitment of \$3-4 Billion Dollars annually until all of the nation's 563,500 bridges are brought up to 20th century standards.

My God, Mr. Chairman, unless such a program is implemented NOW the National Bridge Crisis will be upon us and once again, unfortunately, we will be acting in the middle of the crises and not beforehand. New buses, subway cars and resurfaced highways are certainly needed to improve our transportation system, but should they be given priority over SAFE BRIDGES?

I hope not and truly plead with this Committee to investigate my statements, facts and figures and to then decide the future role of the Federal Highway Fund.

Senator GRAVEL. The hearings are recessed until this afternoon. [Whereupon, at 11:15 a.m., the subcommittee recessed, to reconvene at 2 p.m., the same day.]

AFTER RECESS

Senator BURDICK. The subcommittee will come to order.

This afternoon we have Hon. Robert Crosby, former Governor, State of Nebraska; Mr. Thomas Doyle, State engineer, Nebraska; Mr. Richard Rechter, first vice president, National Limestone Institute; Mr. William Eberle, president, Motor Vehicle Manufacturers Association; Mr. Robert Shertz, vice chairman, American Trucking Association.

The first group of witnesses, Hon. Robert Crosby and Mr. Thomas Doyle, will you please take the witness table.

We will hear from the former Governor of Nebraska first.

**STATEMENT OF HON. ROBERT CROSBY, FORMER GOVERNOR,
STATE OF NEBRASKA**

Mr. CROSBY. Thank you, Senator Burdick, members of the committee.

My name is Robert Crosby, I am a lawyer in Lincoln, Nebr., and a former Governor and Lieutenant Governor of the State of Nebraska, and speaker of the legislature.

We have in Nebraska, and about 19 other States, a special problem, a problem that is acute in Nebraska, and in 9 other States, and that is the need to continue the one-half percent minimum with regard to interstate highway funds.

If it please the Chairman, I have a statement here which I wish to file with the committee. (See p. 1823.)

I have brought with me the State engineer of Nebraska, a highly proficient, and highly respected director of our department of roads, who has demonstrated his ability to get the most out of a dollar, and I will ask leave of the Chairman to have him present his prepared statement.

Senator BURDICK. I see that the Senator from your State has just walked in, Senator Curtis.

**STATEMENT OF HON. CARL T. CURTIS, U.S. SENATOR FROM THE
STATE OF NEBRASKA**

Senator CURTIS. Mr. Chairman, these gentlemen can well take care of themselves, but I do appreciate the chance to be here, and to endorse what they are saying, and to commend them for their efforts.

Nebraska has a very valid interest in the road program. We appreciate the Federal aid and cooperation, but we have also got a lot to do, for we are one State where our interstate highway system is limited to no more than one road, east and west.

We have no road north and south.

We have other problems in local roads.

Mr. Crosby, the distinguished former Governor of Nebraska, and he is now in the general practice of law, he has given great time to public matters, and he has served on various road and highway commissions and committees, and there is no one in the State more able to present our needs than Mr. Crosby.

He is very familiar with these Federal programs, and his recommendations I wholeheartedly endorse.

The other speaker, Mr. Thomas Doyle, is the State engineer, and he is also the director of the highway department, he is an able man, and he speaks on behalf of the Governor of Nebraska, and I commend him to you.

Senator BURDICK. Senator, does not Highway 29 hit Nebraska?

Senator CURTIS. No.

Senator BURDICK. That is too bad.

Senator CURTIS. It is too bad. We are always long on pay and short on receiving.

Mr. CROSBY. We are very honored to have Senator Curtis come and introduce us, because he is loved and respected by everybody in Nebraska.

I was about to introduce Mr. Doyle, our State engineer who has coped with the problem of reduced funds in Nebraska.

He has gotten the last cent out of every dollar, and will ask that he present his statement on behalf of Nebraska.

STATEMENT OF THOMAS D. DOYLE, DIRECTOR/STATE ENGINEER, NEBRASKA DEPARTMENT OF ROADS

Mr. DOYLE. Thank you, Mr. Chairman.

Mr. Chairman, Members of the Committee, my name is Thomas D. Doyle, and I am the director-State engineer of the Nebraska Department of Roads. I appear here today at the direction of Nebraska Governor J. James Exon to offer testimony in support of the continuation of the one-half of 1 percent minimum interstate apportionment factor as contained in existing Federal Aid Highway Acts.

The 1973 Federal Aid Highway Act provided that no State shall receive less than one-half of 1 percent of the national interstate apportionment for each of fiscal years 1974, 1975, and 1976.

The 1973 act further provided that any such funds above the amount required by a State to finance its interstate program shall be available for use on the remaining Federal-aid systems within that State.

Unless Federal legislative action is taken to prevent it, this minimum guarantee provision will expire after 1976.

I am here today to urge that your committee include a specific provision in 1975 highway and transportation legislation which will extend this existing minimum interstate apportionment to all future interstate apportionments.

Currently, title 23 also provides for minimum apportionments of one-half of 1 percent for the primary, secondary and urban systems. These minimums will continue to apply to these categories in the future under existing title 23 provisions.

Although Nebraska is not affected by these minimums at present, we do support the continuation of the existing minimum apportionments for those other appropriation types.

Nebraska fully supports a national goal of completing the interstate at the earliest possible date and we are extremely proud to be among the leaders in terms completing our assigned interstate mileage.

With a continuation of the present minimum interstate apportionment, as we recommend, Nebraska's interstate will be fully funded in

fiscal year 1977 without that continuation, the funding will be stretched out to the current estimated national completion date of 1988.

Since several other States are in a similar position, it is apparent that extension of the one-half of 1 percent minimum interstate apportionment is essential to close important gaps in our respective interstate systems as soon as possible.

I have here a table of data illustrating how the various States would be affected by this proposed continuation. With your permission, Mr. Chairman, I wish to have this table included in the record of this hearing.

[The table referred to follows:]

REFERENCE DATA FOR INTERSTATE APPORTIONMENT PROPOSALS

APPORTIONMENTS BASED ON A \$4,000,000,000 AUTHORIZATION (\$3,800,000,000 TO BE APPORTIONED TO THE STATES)

[In millions of dollars]

	Trust fund contribution factor	1975 cost estimate factor	Plan A—Ap- portionment	Plan B		
				Minimum factor	Apportionment	
					Total	More than A
Alabama	0.018708	0.02422	92.036			
Arizona	.011861	.02781	105.678			
Arkansas	.012434	.00672	25.536			
California	.099350	.05200	197.600			
Colorado	.013165	.02337	88.806			
Connecticut	.011943	.03477	132.126			
Delaware	.002843			00.00500	19.000	19.00
Florida	.038055	.03396	129.048			
Georgia	.028512	.02715	103.170			
Hawaii	.002843	.01306	49.628			
Idaho	.004726	.00450	17.100	.00500	19.000	1.900
Illinois	.047364	.04294	163.172			
Indiana	.029151	.00939	35.682			
Iowa	.016264	.01116	42.408			
Kansas	.013456	.01425	54.150			
Kentucky	.016533	.02030	77.140			
Louisiana	.017007	.03863	146.794			
Maine	.005164	.00281	10.678	.00500	19.000	8.322
Maryland	.016708	.04350	165.300			
Massachusetts	.021324	.00047	1.786	.00500	19.000	17.214
Michigan	.042990	.02812	106.856			
Minnesota	.019111	.02542	96.596			
Mississippi	.012489	.00753	28.614			
Missouri	.026328	.01796	68.248			
Montana	.005051	.00971	36.898			
Nebraska	.009246	.00046	1.748	.00500	19.000	17.252
Nevada	.003922	.00531	20.178			
New Hampshire	.003725	.00703	26.714			
New Jersey	.030842	.02819	107.122			
New Mexico	.007359	.00943	35.834			
New York	.054004	.03701	140.638			
North Carolina	.027765	.02140	81.320			
North Dakota	.003500	.00013	494	.00500	19.000	18.506
Ohio	.049523	.02869	109.022			
Oklahoma	.016061	.00430	16.340	.00500	19.000	2.640
Oregon	.013015	.02824	107.312			
Pennsylvania	.048755	.04106	156.028			
Rhode Island	.003526	.00598	22.724			
South Carolina	.014251	.00697	26.486			
South Dakota	.004150	.00214	8.132	.00500	19.000	10.868
Tennessee	.021919	.02403	91.314			
Texas	.070629	.04413	167.694			
Utah	.006484	.01202	45.676			
Vermont	.002414	.00378	14.364	.00500	19.000	4.636
Virginia	.024151	.05094	193.572			
Washington	.016741	.03277	124.526			
West Virginia	.008158	.02319	88.122			
Wisconsin	.020358	.00928	35.264			
Wyoming	.003160	.00417	15.846	.00500	19.000	3.154
District of Columbia	.002200	.04960	188.480			
Alaska	.001170			NC		
Total	1.000000	1.000000	3,800.000			103.492

NOTES

Plan A—Based only on cost to complete.

Plan B—Substituting a $\frac{1}{2}$ percent minimum factor, if more than plan A.

Mr. DOYLE. Another major consideration which supports the continuation of the interstate minimum apportionment is that there is a serious need to minimize the future potential disparity between the amounts the States contribute to the trust fund for interstate purposes as compared to the amount received back as interstate apportionment.

As some States complete or approach completion of their interstate mileage, this disparity will become more pronounced. Being most familiar with our own situation, I will illustrate this point by explaining how Nebraska would be affected with and without the minimum interstate apportionment.

Assuming, for the purpose of illustration, that the interstate will be funded at an average of \$4 billion per year over the next 12 years, Nebraska will contribute about \$440 million in highway user taxes for interstate purposes over these 12 years. Without a minimum apportionment, we would receive back only \$22 million for interstate over the same period * * * a return of only 5 cents on the interstate dollar between 1977 and 1978. Even with a continuation of the present one-half percent guaranteed minimum, as we recommend, Nebraska's return in these 12 years would still be only \$240 million * * * or about 55 cents on the dollar.

In the latter case, the \$218 million available after complete funding of Nebraska's interstate would under present law be applied to the remaining systems in the State * * * our rural and urban roads.

Surely, if sufficient time were available here today a valid case could be made for maintaining and upgrading these remaining systems which have received a lower priority over the past 20 years of interstate construction.

Undoubtedly, your committee has heard sufficient previous testimony documenting the vital needs to maintain and upgrade the rural and urban noninterstate system of this country. There is no need to belabor this point here.

I respectfully suggest that the one-half percent minimum interstate apportionment serves as a highly important economic stabilizer relative to the overall highway programs in the various States.

It is especially important that it be retained during the transition period we are entering in which the individual States will be completing their interstate mileage and shifting their future program emphasis toward upgrading and maintaining of the other Federal-aid system. If the interstate minimum apportionment is allowed to expire, we will experience a 30-percent loss of Federal highway funds in Nebraska.

Obviously, this will be reflected in a sharp cut in our highway program and a corresponding substantial increase in unemployment in the highway construction industry and related business activity. The same effects will be observed in other States as they too phase out their interstate activity.

In a time of economic crisis, it is imperative that every possible action be taken to avoid even more unemployment in an industry which has already had its share of economic problems.

I would like to make one final important point for your consideration.

On July 9, 1975, AASHTO President William S. Ritchie of West Virginia testified before this committee and presented a number of AASHTO policy positions.

As you know, in order for a policy position to be taken by the American Association of State Highway and Transportation Officials, it must be approved by a two-thirds vote of the membership, or at least 35 States. For the committee's information, a ballot on the proposition of whether to support continuation of the minimum apportionments categories in present law, including Interstate, was sent to the States on May 6, 1975. The result was that 32 voted for and 17 against continuation, with 3 not voting.

Thus, although not an officially adopted policy position of AASHTO nevertheless, it should be noted that 65 percent of those 49 votes which were returned supported the continuation of all apportionment minimums, including that for the Interstate System. I submit that this demonstrates widespread support among the AASHTO member States.

In closing, I therefore again respectfully urge that the committee include in your 1975 transportation and highway legislation, specific provisions to extend the present $\frac{1}{2}$ -percent minimum for all future interstate apportionments as contained in existing law.

I sincerely thank you for the opportunity to appear here today on behalf of the State of Nebraska. I would be pleased to answer any questions you might have at this time, or to submit any additional required material to the committee in writing.

Thank you, Mr. Chairman.

Senator BURDICK. Thank you for your contribution this afternoon.

First of all, I will ask, Mr. Doyle are you acquainted with the highway commissioner of North Dakota?

Mr. DOYLE. Yes; he has worked long and hard on this to achieve a continuation of the Burdick amendment, Mr. Chairman.

Senator BURDICK. Are you aware of his position on this minimum apportionment of $\frac{1}{2}$ percent?

Mr. DOYLE. Yes, I am. His position is as I understand it, the position of Nebraska.

Senator BURDICK. You know, the so-called Burdick amendment, has had great support from my colleague, Mr. Stafford. They tell me in his State, it is called the Stafford amendment. But it makes no difference, because all of these States took the word of the highway administrator that they had to complete the Interstate System. Now we find ourselves faced with a possible funding penalty. It is your judgment and my judgment that the minimum apportionment could be used, when and if the Interstate is finished. It could be used for some of the priorities that were omitted in the last couple of years, is that correct?

Mr. DOYLE. Absolutely.

Senator BURDICK. I cannot find any argument with you.

Mr. DOYLE. Thank you, Mr. Chairman.

Senator BURDICK. Do you want to talk about the Stafford amendment?

Senator STAFFORD. Mr. Chairman, we would be delighted in sharing credit with you. It is the Stafford-Burdick amendment, or the Burdick-Stafford amendment.

I am glad that Mr. Doyle and Mr. Crosby are supporting it, and we think it is only justice for those States that have in a sense beggared themselves to get the highway system completed as rapidly as pos-

sible, and that they ought not to be penalized because of that endeavor by losing any share of the Interstate highway funds, after they have completed their increments of the system, while other States did not move rapidly, are still working to get these completed, and so there is certainly no quarrel.

I have long been acclimated to agreeing with people from Nebraska, because in my college days, 8 or 10 years ago, Mr. Chairman, or more, Mr. Chairman, I played football under a coach in Nebraska.

Senator BURDICK. Well, we do thank you gentlemen very much for coming.

[Mr. Crosby's prepared statement follows:]

BETTER NEBRASKA ASSOCIATION

LINCOLN BENEFIT BUILDING
LINCOLN, NEBRASKA 68508
TELEPHONE 478-5121

ROBERT B. CROSBY
SECRETARY AND COUNSEL

STATEMENT

BEFORE THE SUBCOMMITTEE ON TRANSPORTATION OF THE
PUBLIC WORKS COMMITTEE OF THE UNITED STATES SENATE

Mr. Chairman and Members of the Subcommittee:

My name is Robert B. Crosby. I reside in Lincoln, Nebraska, where I practice law. I have served as Governor and Lieutenant Governor of Nebraska, and as Speaker of its Legislature. A client of our law firm is Better Nebraska Association for which I serve as Secretary-Counsel. Better Nebraska Association, organized in 1949, represents diverse interests connected with highways and seeks to improve Nebraska's highway program.

My appearance today is intended to support the appearance of the Honorable Tom Doyle, Director-State Engineer for Nebraska's Department of Roads. Mr. Doyle has achieved distinction in Nebraska because of his success in getting a high level of performance from the state highway department. For instance, earlier this year Nebraska ranked third among all of the states in having the construction plans and program assets needed to make full use of the released funds that had been previously impounded.

Just one point will be stressed in this statement because of its unique importance to Nebraska and a handful of other states. That is not to say that other issues are not important to us. In general we support the approach adopted by the Howard-Shuster bill; we urge the continuation of the trust fund; we oppose the Administration's proposal to divert into the general treasury taxes that have been paid by highway users; and we oppose allowing taxes paid by highway users to be used for non-highway purposes.

However, if the Howard-Shuster bill is enacted without a minimum one-half percent provision, a crippling blow will be received by Nebraska and nine other states. Strangely enough, the Administration bill which we oppose in general does have the provision needed to save the highway programs of Nebraska and nine other states from this calamity.

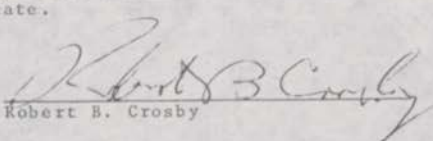
The provision needed by Nebraska is the one that has been contained in the federal highway acts since 1970, namely: that no state shall receive less than one-half percent of the total sum apportioned for interstate highways. This provision is lacking from the Howard-Shuster bill. This provision is continued in the Administration's proposal.

Without the one-half percent minimum, Nebraska will receive only \$1.7 million per year from interstate apportionments; with the one-half percent minimum, Nebraska will receive \$19 million per year. It should be noted that Nebraska highway users will contribute \$37 million per year toward the \$4 billion to be apportioned annually for interstate highways in the Howard-Shuster bill.

Nebraska's plight arises from the fact that its interstate highway program is almost ended. It had only one segment of interstate highway to begin with, an east-west stretch, no north-south stretch. Further, during the 1960's, Nebraska heeded the urgings of the Federal Highway Administration to complete the interstate program by 1972. At the sacrifice of its rural and urban roads, Nebraska sought to meet that goal. Nebraska was one of the few states that kept its interstate program almost on schedule. Consequently, it faces great deficiencies in its rural and urban roads because adequate funds have been denied to them.

Attached is a goldenrod sheet and a sheet of bar graphs, each showing the "disastrous position" of Nebraska and nine other states if the Howard-Shuster bill is not amended to include the half percent provision.

We respectfully urge the committee to amend the Howard-Shuster bill by extending the 1973 Federal-Aid Highway Act provision for a half percent minimum of the interstate apportionment for each state.


Robert B. Crosby

THE DISASTROUS POSITION OF THE HIGHWAY PROGRAMS
IN TEN STATES UNDER THE HOWARD-SHUSTER BILL

PROBLEM

The HOWARD-SHUSTER BILL ignores the position of some 10 states--Delaware, Idaho, Maine, Massachusetts, Nebraska, North Dakota, Oklahoma, South Dakota, Vermont and Wyoming who have substantially completed their INTERSTATE HIGHWAYS.

The 12 YEAR (1988) INTERSTATE COMPLETION SCHEDULE SERIOUSLY REDUCES THE HIGHWAY PROGRAMS in these states.

This would also STRETCH OUT their small amounts of Interstate construction over a 12 year period.

SEE ATTACHED CHART--Nebraska and North Dakota are good examples.

Nebraska would have only about \$1.7 million per year and North Dakota only about \$0.5 million for Interstate.

Iowa, Mississippi, Montana, Nevada, New Hampshire, New Mexico, North Carolina, South Carolina, Utah and Wisconsin are states which MAY ALSO BE AFFECTED BEFORE THE 1988 COMPLETION DATE.

SOLUTION

THE PROVISION PROVIDING A MINIMUM OF 1/2 PER CENT OF THE ANNUAL INTERSTATE APPORTIONMENT TO EACH STATE (as included in the Administration's Highway Bill) SHOULD BE ADDED TO THE HOWARD-SHUSTER BILL.

This provision will provide needed funds to these states to maintain momentum in their HIGHWAY PROGRAMS (SEE CHART) through the years towards 1988.

This provision will EXPEDITE COMPLETION OF THE INTERSTATE IN THESE STATES.

THIS PROVISION WILL PARTIALLY CORRECT THE PAYMENT INEQUITY SOME STATES WILL HAVE IN PAYING HIGHWAY USER TAXES TO COMPLETE THE NATIONAL INTERSTATE SYSTEM THROUGH THE YEARS AFTER THEIR INTERSTATE HIGHWAYS ARE COMPLETE.

FOR EXAMPLE: OKLAHOMA will contribute \$64 million per year toward a \$4 billion INTERSTATE apportionment and receive \$16 million WITHOUT or \$19 million WITH THE MINIMUM 1/2 PER CENT PROVISION.

NEBRASKA will contribute \$17 million per year toward the \$4 billion and receive only \$1.7 million WITHOUT or \$19 million WITH THE MINIMUM 1/2 PER CENT PROVISION.

THE MINIMUM 1/2 PER CENT PROVISION REQUIRES ONLY \$103 million of add'l. authorization per year.

FACTS

The Howard-Shuster Bill would apportion \$4 billion for INTERSTATE AND \$4 1/8 billion for RURAL & URBAN ROADS.

This BILL recognizes the NEED TO EXPEDITE COMPLETION OF THE INTERSTATE AND THE NEED FOR ADDITIONAL FUNDS TO IMPROVE THE NEGLECTED RURAL AND URBAN ROADS SYSTEMS.

For the AVERAGE STATE the bill will provide \$138 MILLION PER YEAR---\$76 million for INTERSTATE AND \$62 million for RURAL and URBAN highways.

The Howard-Shuster Bill DOES NOT EXTEND the 1973 FEDERAL-AID HIGHWAY ACT provision which apportions a MINIMUM of 1/2 PER CENT OF THE ANNUAL INTERSTATE APPORTIONMENT TO THE STATES WHICH ARE NEARING COMPLETION OF THEIR INTERSTATE HIGHWAYS.

STATEMENT OF RICHARD P. RECHTER, FIRST VICE-PRESIDENT OF
THE NATIONAL LIMESTONE INSTITUTE, INC.

Mr. RECHTER. The National Limestone Institute does not accept the assumption that the Highway Trust Fund or our highway program is obsolete. Nor do we feel that there is anything basically wrong with the way this Nation has chosen to build and fund our highway system. In fact, we feel quite the contrary.

The system has proved itself beyond doubt and, with the exception of a few adjustments in priorities we feel are needed, should be continued.

To begin with, we do not believe we can afford to wait for the completion of the Interstate System to fully address the major problems existing on the primary and secondary systems.

What we propose to do is upgrade the funding of these systems in order to correct documented deficiencies. In addition, we feel a strong case can be made for increased authorizations and expanded applicability of the off-system road program enacted in 1974.

For roads in rural areas, we recommend an annual authorization of \$2 billion. The cases for more money for rural roads has long been documented. Further evidence of this was recently released by the Department of Agriculture's Economic Research Service in its "Analysis of the Current Crisis in Rural Transportation."

For roads in urban areas, we recommend an annual authorization of \$1.5 billion.

According to the Urban Mass Transportation Administration, less than 12 urban areas are suitable for fixed-rail mass transit, leaving the remaining urban areas dependent primarily upon the highway mode for the movement of people and goods. This is a fact we cannot afford to lose sight of.

For off-system roads, we recommend annual authorizations of \$500 million. Additionally, we recommend that its applicability be expanded to include roads in urban areas.

Integral to all the above recommendations is the continuation of the Highway Trust Fund; for to turn our back on the trust fund would be to bankrupt a tremendous national investment in a network of roads which has done as much to make this country what it is as any other single factor.

Mr. Chairman, I have some basic comments which do not appear in my prepared statement that affect our industry very much. As you are well aware, the rail system, I will not go so far as to say it has failed, but it has its problems.

In our industry we used to move something upward of 50 percent of our total production per year, which industrywide, reaches almost a billion tons annually. Today the railroad accounts for something less than 10 percent of our movements.

In our company the amount is less than 5 percent. We used to move annually 4 to 5 million tons of crushed stone and sand and gravel. We had seven distributions in Kentucky, Ohio, and Indiana. Today, of these seven we are running two of them. One of them probably will not be running a year from now. Urban primary systems are carrying this additional tonnage.

Nothing has been done with them over the past 10 years to carry this tremendous extra load, that just we ourselves are doing.

As far as the Interstate System goes, the Interstate was built basically within the last 20 years, and most of the stone producers have been at their present plant more than 20 years.

It is a unique situation, when a quarry or sand and gravel operation is on an interstate system, therefore, while the Interstate System carries very little of the tonnage that is produced by the National Limestone Institute members, and many ancillary industries, ready mix, asphalt, concrete block, and so forth, the secondary and rural highway systems are the ones that we depend on to carry our products to our customers.

The failure of mass transit as a cure-all, I think, is readily evident, the Nation was struck by mass transit frenzy, if you want to call it that, it started from the East and the West, and it kind of headed toward Indiana, and it hit the city of Bloomington, where we bought Mercedes-Benz buses, and since that time, ridership has fallen, the taxpayers are now asked to carry the load of operating subsidies, for every quarter that goes into the fare box, it costs the taxpayers an additional 30 cents in subsidies for this mode of mass transit.

Besides that, they are operating at the sufferance of the motoring public, in that they pay none of the 4 cents motorist tax, or none of Indiana's 7 cents per gallon tax. So I believe that it is readily apparent that mass transportation is no panacea.

The last thing I would like to bring to your attention, and it is somewhat of a delicate subject, but it is our view that the Federal Government should keep some type of overview of the dollars that go into the highway program.

Neither of you are not aware that there have been highway scandals. There was one in the State I am from some years ago.

Since that time, we have one of the finest highway departments of the seven States we operate in, but knowing we are all human, we would very much like to see the Federal Government at least keep an overview. Thank you.

Senator BURDICK. Thank you. I think the sense of your testimony is that you want to keep the Highway Trust Fund going.

Mr. RECHTER. Yes, sir.

Senator BURDICK. And you say we need some roads in this country, particularly in the heartland of America.

Mr. RECHTER. Yes, sir.

Senator STAFFORD. Mr. Rechter, do you recommend that \$500 million be made available annually for roads not on the Federal aid system?

Mr. RECHTER. Yes, sir.

Senator STAFFORD. Would you support limiting an expenditure of this fund for projects relating to safety?

Mr. RECHTER. Well, we do not feel that we should limit it to safety, although safety, better roads make safer roads.

This is proven by the Interstate System, which has half of the fatalities of the rest of the system, so if you upgrade these off-system roads, I think a byproduct will be saving lives and saving money.

Senator STAFFORD. I guess your answer is you will not want to limit that money to expenditures of safety.

Mr. RECHTER. We would rather not, sir.

Senator STAFFORD. Thank you.

Senator BURDICK. Thank you.

Mr. RECHTER. Thank you.

Senator BURDICK. Our next witness was to have been Mr. William Eberle, president, Motor Vehicle Manufacturers Association. I understand he was unable to be here today and his statement will be presented by Mr. Russell E. MacCleary, vice president.

STATEMENT OF W. D. EBERLE, PRESIDENT, MOTOR VEHICLE MANUFACTURERS ASSOCIATION OF THE UNITED STATES, INC., PRESENTED BY RUSSELL E. MacCLEARY, VICE PRESIDENT

Mr. MACCLEARY. Thank you, Mr. Chairman. With your permission I will proceed with Mr. Eberle's statement.

"Mr. EBERLE. Thank you, Mr. Chairman. I am W. D. Eberle, president of the Motor Vehicle Manufacturers Association of the United States. I am testifying in behalf of our member companies who manufacture 95 percent of the motor vehicles produced in this country. You are performing an important role in the planning and decisionmaking on national transportation issues, and we appreciate the opportunity to share our views on those issues with you.

"I shall testify most specifically on the Federal role in the planning and financing of the Nation's highway system, but first I wish to emphasize our conviction that decisions on the highway system should be made in the context of the Nation's total transportation system.

"The safe and efficient operation of the Nation's streets and highways is vital to the economy, to the social needs of our citizens, and to national defense. Assuring that safety and efficiency for today and tomorrow is the task you have addressed in these hearings.

"In fulfilling this task it is essential in our judgment that attention be given to the relationship of the total highway system to all other surface systems, to the mobility needs of all citizens and all business, and to social and environmental considerations.

"To assure that these relationships are attended to, we recommend that a program of studies and demonstrations be conducted for the purpose of getting data, knowledge, and insights that will permit this Nation to establish a transportation system that moves all people and all goods with a high degree of efficiency and safety and does so with full observance of personal and environmental amenities.

"One of the subjects deserving study and demonstration is cost-benefit analysis as applied to the Nation's highway systems.

"Cost-benefit analysis should be utilized more fully and effectively in making decisions about the planning, construction, maintenance, and rebuilding of highways, in determining the optimum level of expenditures for the Nation's highway program, and in assuring that the system and level of user charges levied on the various users of the highway system are equitable. Improvements in cost-benefit methodology to incorporate better measures of community values and environmental impact would help make this analysis a more reliable guide to highway policy.

"The application of cost-benefit analysis to the development of transportation system plans, the selection of transportation facilities, will aid substantially in attaining rational and cost-effective decisions not only on highways, but on all related transportation systems.

"We urge also that more work be done in research development and initial operational testing of advance transportation systems and concepts for all modes of urban transportation.

"Such a program should focus on new technology, new concepts of organization, management, and ownership, and new forms of regulation.

"A limited, uniform proportion of the funds from the Highway Trust Fund and the Urban Mass Transportation Act should be used to finance this effort.

"Further, we believe that more attention needs to be given to the impacts of transportation developments on growth in urban areas and the relationship of transportation improvements to the social and environmental objectives of affected communities.

"Some research work is being done in this area and environmental impact statements are now required for many projects. However, we believe that more effort in this area could lead to the development of better highways and better urban public transportation systems, and to land use coordination which can result in more efficient use of facilities and continual improvement in the urban environment.

"In short, I am recommending that a more comprehensive approach be used to assure adequate, equitable financing and to improve the management of the Nation's highway system.

"To plan and to conduct the types of studies I have recommended will be a major undertaking in scope, time, and in investment—and, hopefully, in consequences. The eventual result should be a national transportation policy whose implementation assures a coordinated and balanced transportation program.

"This mission transcends the jurisdiction of any one committee of Congress, any one executive department, and any one level of Government.

"The complexity and interrelatedness of the issues and the multiplicity of Government agencies whose responsibilities are involved suggest the need for an independent and representative body such as a national commission, task force, or advisory committee.

"We commend to your consideration this large and difficult transportation study.

"In the meantime, there are specific decisions to be made on the Federal role in financing and planning of our major highway systems. Regarding these decisions, I offer these observations and recommendations.

"Retaining and improving the service capabilities and the safety of our streets and highways—including farm to market roads—is an essential objective for the Nation. Yet its achievement is not assured. The estimates in the 1974 National Highway Needs Report by the Department of Transportation on the cost of retaining and improving the capacity and safety of the highway system make it clear that the present level of expenditures (in constant dollars) toward meeting that objective should be maintained and unless inflation is controlled more dollars will be required in succeeding years.

"In response to these needs, MVMA will continue to support sound and realistic efforts to apply the resources and the management necessary to retain and improve the capacity and safety of this Nation's

highway transportation system. We expect that can be done by making better use of the existing roads without any major expansion of the present roads.

"The highway system is not a static achievement that will perpetuate itself.

"To underfinance this system is in our view to neglect it—to consciously permit the deterioration that would ultimately degrade our total transportation system with adverse consequences for our economy and our way of life. We must, therefore, seek to keep and improve the service capability and the safety of the Nation's highways. This will require sound management and an assured, equitable method of adequate financing.

"MVMA continues to believe the user charge is an equitable means of distributing highway costs. We support the concept of the Highway Trust Fund because it is financed by specific user costs. It is not a subsidy in any sense of the word.

"The fund is an efficient and proven method for collecting and returning these user funds for the purpose intended, and it is properly subject to the control of the Congress.

"We do believe, however, that only user taxes should be the source of revenue for the fund. The excise taxes on trucks, truck-trailers, buses, and parts and accessories for these vehicles are not use taxes but sales taxes that are discriminatory.

"We believe that these taxes should be repealed. If that were to be done and Congress in its wisdom concluded the remaining revenues were not sufficient to provide the necessary Federal aid for highways, we would support an increase in user charges.

"We recommend the Highway Trust Fund be continued to help finance completion, improvement, and reconstruction of the Interstate Highway System, and for the construction and reconstruction of other parts of the Federal-aid highway system without any further diversion for nonhighway purposes.

"Despite its importance as a transportation network, the Interstate is still unfinished, due in large part to the heavy inflation cost which grows during each additional year of incompletion. MVA believes that the Interstate System should be completed as expeditiously as possible. We recommend that plans be made and funded for completion of the Interstate by 1985, specifying those sections to be completed and those to be deleted.

"The Department of Transportation has estimated the cost to complete the Interstate at \$30 billion. Over a 10-year period this would require \$3 billion per year in constant dollars.

"The President has recommended a funding level for fiscal years 1977 through 1980 of from \$3.25 to \$3.7 billion. We expect that somewhere between these figures—in constant dollars—is the funding level that would permit completion of the Interstate by 1985. We recommend this schedule and the funding necessary.

"As the Interstate is completed, the need for Federal aid does not end. The job of reconstruction, upgrading, and rehabilitation continues. At some time, all sections will require resurfacing and light reconstruction and other work to extend their useful life. We believe Federal aid should be available for all these purposes.

"For the other highway systems that are receiving Federal aid—the urban and rural primary and secondary roads—we urge that Federal aid be continued but with more assurance that the needs are accurately assessed and fulfilled to the extent necessary.

"The reports by Government agencies and by private sector groups vary in their estimate of the present condition of the primary and secondary roads and their projections of the volume of work that should be done on these roads.

"It should be possible to get agreement on the conditions of these roads, the performance standard to which they should be brought, and thus the expenditures necessary from Federal and State-local sources.

"Those expenditures should be made within parameters established by Congress to assure that the best possible use be made of the huge and continuing investments in highway transportation and all transportation.

"On the basis of estimates by the Department of Transportation it appears that the need for Federal funds for the primary and secondary systems are on the order of \$2 billion per year. If inflation is not controlled, larger investments will be required. We recommend this level of funding in constant dollars be considered by the Congress.

"I would have preferred to be more precise and more certain in our recommendations of the amount of money that should be invested in the Interstate and in the other major systems. We have no original data on these issues and there is no unanimity even within the Government on these questions.

"This situation underscores the need for studies that will provide the data, knowledge, and insights required for sound decisionmaking on funding levels and on other major transportation issues.

"In the interests of reducing administrative costs and delays in the Federal-aid highway program we recommend that the existing grant categories—numbering almost 40—be reduced to a handful.

"Such a reduction along with elimination of administrative redtape would allow sounder and faster allocation decisions at the State and local level.

"A simplified system of grants should include funds for improvements at specific locations to alleviate traffic congestion and increase highway capacity—thus improving energy efficiency, and to improve safety on all of the Nation's roads.

"In addition to safety in the design of highways and their immediate environment, the Federal-Aid Highway Acts have also provided for research and demonstration—section 403 programs—and program standards and funding for State and community safety programs directed to highways and to drivers and pedestrians—section 402 programs.

"When the committee's 1975 legislation has been drafted in full following these hearings, MVMA will welcome the opportunity to comment specifically on its provisions.

"For the moment, I suggest that the provisions in this title be designed so as to emphasize that State and local governments have the primary responsibility for deciding how to make the most effective use of the national standards and the Federal funds which are available to them; and, that they have the collateral responsibility to account for their decisions to the Federal agencies, and thus to Congress.

"We urge too, that the grants to States for safety programs be increased substantially in order to gain greater benefits from a program that is of major value to the States' safety efforts.

"Mr. Chairman, and members of this committee, from the beginning of these hearings, it has been clear that you have chosen to concern yourselves not just with highways but with the relationship of highways to all transportation systems. You have emphasized the need for a national transportation policy. We commend you for the depth and the scope of your concern and interest, and we concur in the necessity for this comprehensive approach.

"In this testimony we are recommending that:

"Decisions on the highway system should be made in the context of the Nation's total transportation system.

"A program of studies and demonstrations should be initiated to provide the data and knowledge necessary to achieve a balanced transportation system.

"Federal aid for highways should continue and should be financed by the Highway Trust Fund with revenues from highway users.

"The Interstate System should be funded at a level that would permit completion by 1985.

"The Nation has demonstrated its great competence and energy in building railroads, subways, streets and highways, and transportation vehicles.

"Let us now prepare to demonstrate and apply to these transportation facilities our competence and energy for the research, planning, financing, and management that will produce a transportation system that meets the mobility needs of this Nation and preserves and enhances the social and environmental amenities for today and for tomorrow.

"Thank you, Mr. Chairman."

Senator BURDICK. Thank you for a very good statement.

Mr. MACCLEARY. Thank you.

Senator BURDICK. Our next witness is Mr. Edward V. Kiley, vice president of the American Trucking Associations, Inc.

STATEMENT OF EDWARD V. KILEY, VICE PRESIDENT, AMERICAN TRUCKING ASSOCIATIONS, INC.

Mr. KILEY. Thank you, Mr. Chairman. I have a summary statement which I would like to read at this point.

Mr. Chairman, we appreciate this opportunity to appear before your committee and present our industry's views on the future of the Federal-aid highway program.

Our industry has been a consistent supporter of the Federal-aid highway program as outlined on the Federal-Aid Highway Act of 1956. We have, over the years, supported this program, reiterating this support repeatedly before this committee and its companion committee in the U.S. House of Representatives.

We believe the 1956 program, particularly with the emphasis on early completion of the National System of Interstate and Defense Highways was a sound program and one which has conferred enormous social and economic benefits upon the country.

It is unfortunate that the program has been delayed by the impoundment of highway funds, which we believe to have been unjustified and unnecessary. Not only has this impoundment delayed completion of the Interstate System, it has also added to the costs because of the inescapable results of continuing inflation.

We believe it equally unfortunate that the program has been criticized and attacked as being unwise in its conception and unnecessary in terms of the country's total transportation needs.

These attacks, and criticisms, we are convinced come from a failure in many quarters to understand the true nature of the program, its purpose and the method of financing.

Our industry supported the Federal Highway Trust Fund concept of financing, as eventually devised by the Congress, and believe that without this concept the program would have been impossible to conceive or to complete.

We are, therefore, opposed to use of the trust fund moneys for other than highway purposes. From the beginning of the trust fund has been supported by special taxes on highway users—with the trucking industry paying a large share of these special taxes.

The trucking industry's taxes which have been going into the trust fund, and which continue to go into it, have no counterpart in other areas of transportation.

They are not general taxes. We consider them to be special taxes for a special purpose—the highway program. We believe legislative history of the highway program indicates quite clearly that these taxes would not exist if we did not have a highway program with the taxes dedicated for that purpose.

The special truck taxes represent considerable additional costs of truck operations, but we have indicated our willingness to pay them as long as they went for highways—and dedicated for this purpose through the Highway Trust Fund.

The impact of the special highway taxes on the trucking industry and the contributions the industry has made to the Federal highway program are illustrated by the fact that although all trucks represent only 17.3 percent of total motor vehicle registrations, they are paying 42.6 percent of all Highway Trust Fund taxes.

Even more important and more graphic is the fact that trucks over 26,000 pounds gross-vehicle weight represent but 1.2 percent of all motor vehicles on the highway, but pay 17.8 percent of all Highway Trust Fund Taxes.

We believe there is no justification whatsoever for any charge that trucks, particularly the heavy trucks, are not paying their fair share of the Federal highway program. We believe this question was succinctly answered by Congress in 1961, when after exhaustively reviewing the highway cost allocations studies it had ordered be made, concluded that the heavy truck was paying its fair share of the taxes for the Federal highway program.

If, however, the Highway Trust Fund ceases to be a highway fund and the moneys are used for other purposes, then we believe our special taxes should be repealed or reduced accordingly.

This does not mean that our industry is ignorant of, nor insensitive to the needs in other areas of transportation.

But those needs should be financed through other means, and if this should mean general tax revenues, applying to all businesses on an equal basis, then we would, of course, pay our share of these general taxes.

But we cannot accept the proposition that through special taxes on our industry alone we should be called upon to support the highway program and to support other transportation programs as well.

The highway studies referred to in our main statement clearly indicate the pressing need for revenues to complete the Interstate System and to provide for continuing modernization of the system as these needs arise.

However, we believe the Federal commitment to a highway program must continue to go beyond the Interstate System. The other Federal-aid systems need upgrading and improvement, particularly in the rural area. The Highway Trust Fund should be continued and dedicated to these programs as well.

Thank you very much.

Senator BURDICK. Thank you very much for a very fine statement. I see you are in favor of the continuation of the program.

Mr. KILEY. Yes, sir, we are.

[Mr. Kiley's prepared statement follows:]

STATEMENT OF EDWARD V. KILEY, VICE PRESIDENT, AMERICAN TRUCKING ASSOCIATIONS, INC.

My name is Robert H. Shertz. I am Vice Chairman of the American Trucking Associations, Inc., and President of RLC Corporation, Wilmington, Delaware. I am also chairman of our industry's SCORE Committee (Safety Committee on Research and Environment), the trucking industry's committee particularly concerned with highway safety. Appearing with me is Edward V. Kiley, Vice President of ATA's Research and Technical Services Division.

We appreciate this opportunity to appear before your Committee and express our industry's position on the Federal highway program, with specific references to some of the proposals currently before the Congress.

Our industry has been an ardent and consistent supporter of a progressive Federal highway program that would continue to provide our country with a modern system of safe highways—including all of our highway systems.

Still left unfinished is the bold, and we believe, highly justifiable program laid out in the Federal-Aid Highway Act of 1956. The trucking industry played an important role in the formulation of that program. We believed in it then; we continue to believe in it today. We believe, further, that the most urgent priority is earliest possible completion of the National System of Interstate and Defense Highways, as planned and designated by the Congress.

We believe the highway program has bestowed enormous social and economic benefits on the country. If we had not had the program, even though unfinished at this time, we would be faced with transportation problems of unmanageable proportions. Failure to complete the program, in terms of the National System of Interstate and Defense Highways, has been the result of unjustified impoundment of highway funds and of a lack of complete understanding in the public arena of the nature of the program, its purpose and method of financing.

Labeling of the Federal Highway Trust Fund as a "sacred cow;" attacks on the program as being carried out at the expense of other transportation projects; and similar criticisms have, we believe, served only to confuse the true issue and acted to delay an essential and highly needed public works program.

In 1956 when the program was begun, there were 65.1 million motor vehicles in the United States; in 1974 we had 133.7 million motor vehicles. In 1956 our population was 168.9 million; in 1974 we had a population of 212.8 million. In 1956 our gross national product was \$419.2 billion; in 1974 our gross national product was \$1.397 trillion.

These increases were not caused by the highway program, but the highway program has made it possible for the Nation to accommodate this growth. Where would we be today in terms of highway safety, personal and industrial mobility, transportation service and industrial development had not the Congress, and particularly this Committee, had the foresight and courage to plan and legislate this program.

The highway program has been attacked from many sources, including those concerned with the environment and anything they believe acting to its detriment. It is entirely conceivable, however, that these critics may, unknowingly, be attacking the very thing that can correct many of the problems with which they, and all of us, are concerned.

Many of our environmental and social problems we now recognize stem from the fact that an abnormally large percentage of our people are concentrated within a ridiculously small percentage of our land area. Our large cities are on the verge of becoming unmanageable—with social and environmental problems that seem to defy solution. As an answer to this we would suggest consideration of a national commitment and national program to seek greater dispersal of our population, our industries, and our jobs, by creating many new and small more manageable communities and industrial complexes. Such an approach, however, is possible only through an adequate highway network, as highway transportation is the only form of transportation with the flexibility and adaptability that can make such diversification possible.

This was succinctly stated by Representative Don Clausen of California during hearings on the Federal-Aid Highway Act of 1970.

Congressman Clausen stated: "Ever since I have come to the Congress, I have been suggesting that the answer to the urban or metropolitan ills of America lies in the revitalization and diversification of rural America . . . and, I believe that the Congress is now finally addressing itself to this. It isn't a question of whether or not it's going to happen. I believe it's just a question of *when* it's going to happen.

"Transportation is the key to orderly economic development . . . and, as a member of the Roads Subcommittee, I offered an amendment that addressed itself to that particular aspect. The Interstate Highway Program in America has provided more in the way of job opportunities for people because of our ability to move people, goods and services than any other singular program that I know of."

It seems to us there are several fundamental—absolutely basic—questions which must be answered by this committee. You are concerned, in these questions, not just with highways, not just with what use is made of highways, not just with how highways are financed.

The basic questions are these:

Are we in this nation going to adopt a philosophy—a social concept—which forces people into fewer and fewer, but larger and larger population centers? Are we going to force people to abandon their dream of a home away from the center city, with its plot of ground that a man can call his own? Are we going to cast aside rural America—the farms and small communities that are the heart of this nation?

Constricting sound highway development could lead only to affirmative answers to all of these questions. We do not believe the American people want that kind of a social concept forced upon them.

There is ample evidence from studies from the Department of Transportation and from the American Association of State Highway and Transportation Officials that there is a compelling need for a continuing Federal highway program even after the Interstate System is completed. These needs come not only from the necessity of keeping the Interstate System up to modern standards, but to upgrade and modernize thousands of miles of other parts of the Federal-aid systems that are badly in need of attention.

Our industry supports such a continued program, financed through continuation of the Federal Highway Trust Fund with present taxes at present rates. We have expressed this position repeatedly before the Congress and expressed our willingness to continue to pay our fair share of the highway program as long as it remained a highway program.

Since its inception the Highway Trust Fund has received no appropriations from the general fund. It has been a completely self-sustaining, pay-as-you-go, program and has represented no drain on the Federal budget nor has it been at the sacrifice of any other Federal programs.

The Act of 1956 specifically provided that the Federal government's highway appropriations had to be governed by the taxes that were being paid by highway users. If the taxes were not coming in, the highway authorizations could not be made. Tax collections determined the maximum level of expenditures.

This self-sustaining, independent method of financing was not unplanned or accidental. It was the result of a carefully worked out program that involved the cooperation and understanding of the Congress and the nation's highway users. Without this understanding, and the acceptance by highway users of the financial responsibility, the highway program would not have been possible.

We believe this background as to the intent and purpose of the Highway Trust Fund taxes, plus the admitted continued need for a highway modernization program, supports the fullest possible application of available funds to get the job done.

The highway tax burden, and its specific relationship, fixed by Congress, to the highway program is of particular concern to the trucking industry. Alone, of all the transportation modes, the trucking industry pays special Federal taxes on all of its fuel, its lubricants, its equipment, both trucks and trailers, parts and accessories, plus a special weight tax on certain heavy trucks.

This position does not mean that our industry is oblivious, or insensitive, to other needs and other problems. But it does evidence our strong feeling that there must be a continuing recognition of the important relationship between the highway program and the special taxes that were levied to support it.

We share the obvious concern for urban transportation problems, and have no objection to any program to improve public transportation of any type. But we believe that to the extent these problems are not being solved through highway programs, there should be other supplemental programs. We have publicly stated in the past and state today that as an industry we would bear our fair share of any across-the-board tax to help pay for such a program. We would recognize the same responsibility of any other business or industry, on a general basis. However, such programs are not the special responsibility of truck owners. They are the responsibility of everyone.

We are willing, as an industry, to share this responsibility with everyone. But we cannot accept the proposition that in addition to our recognized responsibility for the highway program—which we are discharging through high special taxes—that we also have a special tax responsibility for other programs. This proposition violates basic elements of equity and justice.

When we begin to use the Highway Trust Fund revenues for non-highway related programs, then we no longer have a highway fund—in which case the "fair share" criteria ceases to apply and there is no justification for special taxes on the trucking industry.

When Congress passed the Federal-Aid Highway Act of 1956, it very carefully provided for full Federal financing of the expanded highway program by special taxes on the nation's motor vehicle owners and operators.

The taxes on motor fuel (gas and diesel), the tax on lubricating oil, the tax on tires and tubes and on tire retread material, the tax on new trucks, buses and trailers, the tax on truck and bus parts and accessories, and the special weight tax on trucks with a taxable gross weight of more than 26,000 pounds, provide the total source of Federal highway financing.

We cannot, and have not, considered these taxes as general taxes to be used at will for any other program. We believe they are special taxes levied for a special purpose and related to a specific government program. The legislative history of the Highway Revenue Act of 1956, and subsequent Congressional actions, demonstrate this conclusively.

These taxes represent heavy additional costs of motor carrier operations, and as such are important factors in the competitive transportation picture. They are justified only because there is a highway program. The highway taxes contain an extremely high differential against the heavier trucks. This is because of a Congressional determination of the "fairly assigned share" of the cost of the highway program. It is a tax load, including the differential, that the trucking industry has repeatedly stated it is willing to bear as long as we need a highway program and the taxes are used for highway-related purposes.

The impact of the special highway taxes on the trucking industry and the contributions the industry has made to the Federal highway program are illustrated by the fact that although all trucks represent only 17.3 percent of total motor vehicle registrations, they are paying 42.6 percent of all Highway Trust Fund taxes. Even more important and more graphic is the fact that trucks over 26,000 pounds gross vehicle weight represent but 1.2 percent of all motor vehicles on the highway, but pay 17.8 percent of all Highway Trust Fund taxes.

We believe there is no justification whatsoever for any charge that trucks, particularly the heavy trucks, are not paying their fair share of the Federal highway program. We believe this question was succinctly answered by the Congress in 1961, when after exhaustively reviewing the highway cost allocations studies it had ordered be made, concluded that the heavy truck was paying its fair share of the taxes for the Federal highway program.

We urge the Congress to provide for expeditious completion of the Interstate System and for the continued modernization and updating of our other road systems. This cannot be done, however, unless the Trust Fund is kept intact and permitted to do the job it was designed to accomplish.

As far as other transportation programs are concerned, they should be subjected to the same close scrutiny and examination that preceded the enactment of the Federal-Aid Highway Act of 1956—and as in the case of that program, a fair and equitable tax structure should be devised to finance them.

Our industry, as we have stated, would recognize the general responsibility of all business and industry for such programs, and support them on this basis. But for such programs, we cannot accept special taxes applying to our industry alone.

It is for these reasons as well as for reasons based on general equity and practicality that we cannot support the program of the Administration as outlined in H.R. 8430. As far as the items in that bill before this Committee are concerned, we cannot agree with a Federal highway aid commitment that would assign the Trust Fund to nothing other than support of the National System of Interstate and Defense Highways. The Federal highway commitment must go beyond the Interstate System—it is only part of a total, connected road network. The same type of planning and development of the Interstate System that was possible because of the dedication of Trust Fund revenues is also necessary for the progressive improvement of our other road systems.

Senator BURDICK. That brings the hearings to an end. The subcommittee will now be adjourned.

[Whereupon, at 2:45 p.m., the subcommittee adjourned.]

STATEMENTS FOR THE RECORD

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., June 17, 1975.

HON. LLOYD BENTSEN,
*Chairman, Transportation Subcommittee,
Senate Committee on Public Works,
Senate Office Building.*

DEAR SENATOR BENTSEN: Legislation to further erode the highway trust fund has been introduced in the Senate (S. 1300), and referred to your Subcommittee on Transportation.

The Governor of Nevada, Mike O'Callaghan, very forcefully and aptly expresses his reservations with any proposal to adopt a single transportation trust fund concept. I share his concerns and position, and would ask that you enter Governor O'Callaghan's letter into the record of hearings on the highway trust fund legislation scheduled for the period of July 17 to July 31, 1975.

Sincerely,

JAMES D. SANTINI,
Member of Congress.

[Enclosure.]

THE STATE OF NEVADA,
EXECUTIVE CHAMBER,
Carson City, April 16, 1975.

HON. JAMES SANTINI,
*House of Representatives,
Longworth House Office Building, Washington, D.C.*

DEAR CONGRESSMAN SANTINI: In reviewing the many legislative proposals to help solve transportation problems, my office has studied the Kennedy-Weicker bill entitled "Federal Transportation Improvement Act of 1975" (S. 1300).

This particular legislation, in my opinion, should be of grave concern to all western states. The obvious intent is to shift the emphasis of the transportation

program from highway programs to mass transit. While there is no question of the need for mass transit in many of our larger cities, we cannot permit the highway program to be given less priority. This is particularly important to the western states, where the vast majority of all movement of people and goods is accomplished by highways. Governor Norbert Tiemann, the Federal Highway Administrator, recently stated that the nation's highways are deteriorating twice as fast as they are being replaced or modernized.

Unquestionably, there is room for improvement in using our highway system to accommodate rubber-tired transit facilities, but to give priority to "fixed-guide way" and "electric powered" projects in mass transit is simply failing to recognize the balance required in our transportation system nationwide. Some argument can be made that the mass transit problem is not national, but is an urban problem for ten or twelve major cities.

If a pure single transportation trust fund concept is adopted, all of the revenues generated by the users of our current transportation facilities will not fund the existing needs in the mass transit area alone, not to mention highway programs.

The bill, as written, does not make adequate commitment for the completion of the Interstate System. The 3.25 billion dollar per year commitment would extend the completion of the Interstate System probably beyond the year 2000. I do not feel the Nation can afford the extension of this program to that late date.

While the legislation delegates the responsibility for the integrated planning process to the Governor, it does not give him the *authority* needed to implement this same responsibility. It is indicated that the Urban System plans would have to be developed by local officials and the final State plan approved by the Legislature and the Federal Secretary of Transportation. The implementation funds would pass through to urbanized areas in excess of 150,000 population.

It always has been my concern, and still is, that the Governor should be given the responsibility for developing *and implementing* the integrated transportation programs within any given state and also that no urbanized area, regardless of its size, should be escalated to the status of a state. In order to have a truly integrated system, the Governor must have the authority and capability of controlling the transportation planning processes and implementing programs for him to properly execute the responsibilities which logically are his.

I definitely support the reduction in the number of control categories. This reduction should also be structured to allow the maximum amount of flexibility to the various states in order for them to address the varying problems that exist in their particular situations.

In closing, I want to emphasize my opposition to any legislation which would force the restructuring of State government. It should be broad enough to allow the resolution of state problems at the State level and very definitely should not interfere with the relationship between State and local government.

Thank you for your attention to this matter.

Sincerely,

MIKE O'CALLAGHAN,
Governor of Nevada.

CITY OF CINCINNATI,
OFFICE OF THE CITY MANAGER,
Cincinnati, Ohio, August 7, 1975.

Senator LLOYD BENTSEN,
Chairman, Transportation Subcommittee of the Senate Public Works Committee,
Dirksen Senate Office Building, Washington, D.C.

DEAR SENATOR BENTSEN: I have recently been informed of the activities of your subcommittee in holding hearings which address themselves to "The Future of Transportation in America".

Cincinnati is deeply concerned about transportation in our urban area and the attached statement expresses some of our thoughts in this matter. I trust it will be helpful in developing a broad Highway Bill recognizing the multi-model needs of Urban America.

Sincerely,

WILLIAM V. DONALDSON, City Manager.

STATEMENT OF WILLIAM V. DONALDSON, CITY MANAGER, CINCINNATI, OHIO

Mr. Chairman, Members of the Subcommittee, my name is William V. Donaldson and I am the City Manager of Cincinnati, Ohio. Cincinnati is the central city for the Ohio, Kentucky, Indiana Regional Council of Governments composed of nine counties in the States of Ohio and Indiana and the Commonwealth of Kentucky. I might add that both the legislative and administrative branches of our city are deeply involved in this local planning authority committed to the comprehensive transportation planning process.

Cincinnati's commitment to provide adequate transportation facilities is further exemplified by the recent acquisition of the local transit company. To support this local need the voters approved an increase in the Income Tax to provide adequate financing for the expanded transportation services.

It is our opinion that the above involvement demonstrates our interest in urban transportation problems. To provide your subcommittee with meaningful information for evaluating the future transportation needs of Urban America I should like to present to you our experiences with the use of Urban System Funds as provided by the Federal-Aid Highway Act of 1973 as well as our recommendations for future legislation.

EXPERIENCES WITH URBAN SYSTEM FUNDS

Cincinnati was most interested in using these funds for various modes of transportation. Therefore, we submitted at an early date high priority requests for financing a pedestrian bridge, hike and bike trail, bus maintenance facility, rehabilitation of a large double-deck viaduct and several major thoroughfares that were strongly endorsed by the local community. This submission was confronted with the following difficulties.

1. Some minor reluctance on the part of some officials to use highway funds for other purposes.
2. The inexperience of state and federal officials in dealing with the new program.
3. The complicated system of working with the local planning authority, state and federal officials. This problem was further compounded by Cincinnati's need to use other than City sources for local funding.
4. The maze of developing a multi-model program that would place planning, right-of-way and construction activities in JUST the right year to exactly use up the dollar amount designated for Cincinnati's use within the allotted two year frame. Even with such a program developed the odds are tremendous that it will ever be implemented without losing some funds. Federal planning requirements defy such precise implementation.
5. The difficulty of state and federal officials agreeing to a distribution formula for large urban areas.
6. Lack of sufficient federal funds to satisfy all our local needs.
7. Small projects generally having a project cost of less than \$100,000 are not worth seeking Urban System Funding assistance since the project is made considerably more complicated and delays implementation, requires standards above that needed and at least doubles project cost.

The above difficulties are probably typical of many other communities and I hasten to qualify these experiences with the fact that all government, state and local planning officials were most cooperative in assisting us in developing a truly multi-model program. We believe it is these types of problems, delaying project programming, that have possibly given a false impression that various states have failed to obligate Urban System Funds apportioned to them. It is our opinion at this time that all apportionments to the Cincinnati area will be obligated.

A copy of Cincinnati's Urban System Program is attached hereto for your information.

RECOMMENDATIONS FOR FUTURE LEGISLATION

Experience gained to date indicates that the following features should be incorporated in any new Highway Bill.

1. Many of Cincinnati's 400 bridges and 900 miles of streets require rehabilitation to meet safety and capacity requirements. Authorizations under the Federal-Aid Highway Act of 1973 are not sufficient to meet our transportation

needs. Therefore we would encourage an expansion of this authorization to an annual level of \$1.5 billion.

2. The two (2) year period for funds being available for obligation after the close of the fiscal year for which they are authorized is not acceptable. This should be expanded to a minimum of four (4) years or the method of obligating these funds should be simplified.

3. The greatest flexibility possible should be permitted to allow local communities to use Urban System Funds for a broad transportation program consisting of all modes of transportation.

4. Federal participation under all programs should be uniform so that a local community is not discouraged from using Urban System Funds for all modes of transportation.

5. A further simplification of procedures by greater use of local planning processes is needed.

6. The amount of funds apportioned to each state for replacement of inadequate bridges should not be restricted.

7. Greater use of federal funds for the reconstruction and even maintenance of the Interstate System is essential.

Cincinnati appreciates the opportunity of presenting this material to your subcommittee and we trust that our experiences will assist in the development of a Highway Bill that will permit urban areas to develop a balanced transportation system that is structured to their particular needs.

MARYLAND DEPARTMENT OF TRANSPORTATION,

July 29, 1975.

HON. LLOYD BENTSEN, Jr.,

U.S. Senate,

Russell Building, Washington, D.C.

DEAR SENATOR BENTSEN: I was pleased and encouraged to learn of your hearings on national transportation issues. From our previous conversations and correspondence, I know you are aware of my concerns on the transportation outlook for this country. It is also clear to me that we share a great many concerns on specific portions of present and proposed transportation legislation. Again, I wish to go on record as being available to work closely with you and other members of your committee on transportation issues.

Members of my staff are currently assessing President Ford's proposed highway legislation. My immediate reaction is that his program does go some way towards addressing those issues you and I have discussed in the past. It is also clear to me, especially in light of the resolve of the Conference of State Departments of Transportation and the position taken by the National Governor's Conference, that President Ford's proposal will not be sufficient to meet transportation needs as they currently must be addressed at the state level. However, I must emphasize that, since this proposal has been released only recently, we have as many questions as we have answers.

While the Conference of State Departments of Transportation will be meeting to discuss, among other things, the Ford Administration's highway proposal, that meeting will not take place until August 7-8, 1975. I bring these facts to your attention only to point out that while both the Maryland Department of Transportation and the Conference of State Departments of Transportation are greatly interested in the direction and form any highway legislation might take in 1975, we would like to hold our formal testimony until late August, near the end of your hearings. I will follow-up that point with your staff.

While I am sure that some means will be found to convey whatever helpful information I might have to your committee's deliberations, let me at this time reiterate some of my more major concerns:

(1) Except for construction and maintenance of the interstate highway system, the federal government should assume a diminished role in the highway business.

(2) The categorical grant programs and the highway programs should be reduced to four basic areas—interstate, urban, rural and safety.

(3) The federal gasoline tax should be reduced from four cents to one-cent per gallon. The states should have the option of picking up part or all of the difference.

(4) States and localities should be held responsible for program development and follow through.

(5) Mandatory compliance with federal guidelines for a particular project should not be enforced by the threat to cut off twenty per cent of a state's federal highway assistance program whenever every single regulation is not met.

I realize this is but a cursory review of the major issues in a complex and most important area. However, I feel they should be reiterated as your committee continues its deliberations. Again, let me assure you that as the State Secretaries of Transportation have a chance to digest the Ford Administration's proposal, we will be most willing and anxious to provide you with whatever information and assistance you feel appropriate to accomplish what I see as our worthwhile, common objective.

Sincerely,

HARRY R. HUGHES, *Secretary.*

MANUFACTURED HOUSING INSTITUTE,
Chantilly, Va., August 22, 1975.

Attention: Ron Katz, Professional Staff Member.

Hon. LLOYD BENTSEN,
*Chairman, Subcommittee on Transportation,
Committee on Public Works, U.S. Senate,
Dirksen Senate Office Building, Washington, D.C.*

DEAR SENATOR BENTSEN: In lieu of verbal testimony, may we present this statement for the record of your extensive hearings on the future of the highway program.

The Manufactured Housing Institute is the national trade association for the major builders of mobile homes, portable schoolrooms, and movable offices, along with the hundreds of supplying industries that provide components and furnishings for those structures. Our products, the factory-built permanent dwellings, need good primary and secondary highways in order to be delivered to the dealers and then on to the home buyer's lot. In fact, this low-cost housing industry evolved and developed right along with highway improvements that followed World War II. It could not exist without the modern highways, but the highway improvement and reconstruction program is far from finished.

Our homes are towed only by large truck-tractors operating under very strict moving permits issued by state highway officials, which accounts for our very low traffic accident record. This enables delivery of fine modern homes to the low and moderate income families—largely in suburban and rural areas. It enables a solution to the housing shortage, as the average cost of a factory-built home is still only \$9,800.

Therefore, a continuation of the traditional highway program is essential for the growth of our industry so that the major arterials may be widened when needed, so that the Interstate System and other needed freeways may be completed, so that the 32,240 inadequate bridges on the Federal-aid highways will be corrected, so that highway safety programs can be expanded, and so that reconstruction of wornout roads can proceed. To assure completion of these essential programs, we feel that the Federal Highway Trust Fund should be continued with the current Federal taxes on motor vehicles and motor fuel allocated to it. If ever those revenues are not needed for highways, the taxes should be reduced or repealed.

This Institute has no objection to urban rapid transit systems, but we strongly oppose taking away highway funds to subsidize it. Our factories, dealerships, and customers are largely located in rural areas and small towns. Mobile home communities are seldom on mass transit lines, which makes our home buyers very dependent on continued highway improvement for their essential business and family trips. Our factories need good highways for incoming raw materials and outgoing finished homes. We suggest that subsidy for mass transit should come from general revenues, special transit benefit taxes, or as was done in Mexico City—pay for the subway out of the National Treasury.

Specifically, we oppose the Administration Bills (H.R. 8430 and S. 2078) which start to phase out the Highway Trust Fund, and the Kennedy-Weicker Bill (S. 1300) which would abolish it. We see no need to abolish a system that

has been so successful: the highways are paid for only by those who use them, the road program does not require subsidy, it is self-sustaining, and all the current revenue sources in the national and state highway funds are needed to keep the highway and street systems adequate to serve the expected growth in the years ahead.

Finally, we urge you and your Committee to keep the highway program going under the currently successful financing methods.

Sincerely,

JOHN M. MARTIN,
President.

STATEMENT OF THE NATIONAL AUTOMOBILE DEALERS ASSOCIATION

The National Automobile Dealers Association, on behalf of its 20,000 franchised new car and truck dealer members, would like to take this opportunity to express its views on the vital need for the Congress to extend the life of the Highway Trust Fund to insure that an adequate funding source will be available at the Federal level to continue the Federal Government's commitment to state and local governments in construction of highways of importance to the Nation's economic and social health. Continuation of such support is vital if the Nation's road needs over the next decade are to be met. It is NADA's conclusion that continuing the Highway Trust Fund as a principal means of financing the Federal Government's involvement in highway construction provides the best alternative for insuring adequate Federal funding during the coming years.

Of highest priority from the Federal Government's standpoint, in NADA's view, is the need to complete the Interstate System as rapidly as possible. The "gaps" in the System at the present time should be completed as rapidly as feasible, and should receive priority funding to insure that the goal is met. Because NADA views completion of the Interstate System as a principal priority of the Federal Government's efforts in this area, NADA would strongly urge the Congress to continue to fund 90 percent of the cost of those parts of the Interstate System which remain to be built.

In addition to those sections of the Interstate System which remain to be built, NADA would also favor utilization of Highway Trust Fund monies to upgrade and reconstruct those portions of the present Interstate System which do not meet current construction and safety standards for the Interstate System. This is vital if the "spirit" as well as the "letter" of the Congressional intent in creating the Highway Trust Fund is to be met. NADA strongly urges Congress, therefore, to insure that the funds in the Highway Trust Fund will be utilized to complete the entire Interstate System at present standards of safety and service.

In urging the highest priority be given to completion of the Interstate System, NADA is cognizant of disputes surrounding controversial segments of the System which remain to be constructed. While taking no position either "pro" or "con" on whether these individual segments should or should not be built, NADA does firmly believe that these disputes should be resolved as soon as possible before costs further escalate. Monies which were obligated for sections which will not be built should be reallocated to other segments of the Interstate System remaining to be constructed. In this way, the final completion of the entire system can be effectuated in the shortest possible time.

NADA further believes that funds should be allocated on a priority basis to those states which are prepared to utilize the funds so obligated as soon as possible after such obligation. This would enable those states which are most prepared to move forward in completing their Interstate sections to do so as rapidly as possible. Those states which are not prepared to move as rapidly would receive the necessary obligations at a later date when they are prepared to move forward in completing their segments of the System.

To assist in the administration of the Highway Trust Fund, NADA urges the Congress to consolidate and streamline the number of existing categories of Federal-Aid Highways programs. The present 38 categories of programs which are funded by the Highway Trust Fund should be streamlined to include the following four functionally classified systems called for in the 1973 Federal-Aid Highways Act—Interstate, Primary (rural and urban), Rural Secondary, Urban. A fifth category should include Safety. NADA believes that this step

will result in a far more cost effective approach to Federal expenditures from the Highway Trust Fund. It will hopefully reduce much of the "redtape" currently abounding in this area.

Of prime concern to NADA are the efforts of some in the Congress to detour the monies in the Highway Trust Fund to cover operating subsidies and/or rail transit facilities for rail and mass transit systems. NADA strongly objects to the use of the Highway Trust Fund for such expenditures. The monies available in the Highway Trust Fund are generated by highway user taxes. The needs of the Nation for continued significant expenditures by the Federal Government for highway construction certainly indicate to NADA that the Trust Fund must continue to provide an adequate source of funding for these programs. NADA does believe, however, that Highway Trust Fund monies should continue to be used for highway safety programs and for capital investment in highway related transit facilities, such as special bus lanes, fringe and corridor parking facilities, and traffic control devices. These highway related programs are in NADA's view worthy of continued Federal funding through the Highway Trust Fund as genuinely benefiting those who pay the taxes to fund the Trust Fund—the highway users of the Nation. NADA would reiterate its strong opposition to funding operating subsidies for mass transit and/or rail transit facilities out of the Highway Trust Fund. NADA believes these programs if judged worthy of Federal financial support should be funded out of the general revenues of the Federal Government.

To summarize, NADA believes the Congress should take the following steps with respect to the Highway Trust Fund:

1. The Federal Government should continue to provide 90 percent of the cost of completing the Interstate System and of the cost of reconstructing and rehabilitating it, where needed, to current standards of safety and services;
2. The presently authorized Interstate Highway System should be completed as soon as possible. Resolution of all disputes involving controversial segments should be made as soon as possible before costs further escalate;
3. State should be required to use allocated funds in any year before additional monies would be allocated to complete their portion of the Interstate System;
4. The present 38 categories which administer the Highway Trust Fund monies should be reduced to five—Interstate, Primary, Rural, Urban, and Safety;
5. Highway Trust Fund monies should continue to be used for highway safety programs and for capital investment in highway related transit facilities, such as special bus lanes, fringe and corridor parking facilities, and traffic control devices. However, funds for operating subsidies and/or rail transit facilities should come from general revenues.

NADA would like to thank the Committee for this opportunity to provide its views on the need to continue the Highway Trust Fund and make certain adjustments to further increase the efficiency of the Fund. If the Committee has any questions or comments concerning the Association's position in this matter, please do not hesitate to contact it.

NATIONAL CRUSHED STONE ASSOCIATION,
Washington, D.C., August 19, 1975.

HON. LLOYD M. BENTSEN,
U.S. Senate, Washington, D.C.

DEAR SENATOR BENTSEN: In connection with the recent comprehensive Transportation Hearings conducted by your Senate Transportation Subcommittee, I am herewith enclosing for your personal information a copy of the Statement developed by the National Crushed Stone Association, Washington, D.C. which we asked be included as part of the Record of your recent Hearings on a National Transportation Policy.

We appreciate this opportunity to present this Statement and we trust that these comments will be considered as the Statement reads. We have attempted to offer concise views and recommendations on selected issues which were considered by your Subcommittee during the July Hearings.

We wish to congratulate you, your fellow Subcommittee Members and staff for the efforts to date and we trust that Congress will move as quickly as possible to work with the Administration to develop an adequate Highway Bill as the key link in moving to solve our total surface transportation needs.

Please advise us if we can be of any further assistance.

Very truly yours,

W. L. CARTER, *President.*

Enclosure.

STATEMENT FOR THE RECORD OF THE NATIONAL CRUSHED STONE ASSOCIATION FOR
THE TRANSPORTATION SUBCOMMITTEE OF THE SENATE PUBLIC WORKS COMMITTEE,
AUGUST 19, 1975, SUBMITTED BY WILLIAM L. CARTER, PRESIDENT

In keeping with the "key issues" format used during your successful July hearings, which explored both highways and transportation needs, the National Crushed Stone Association appreciates this opportunity to provide the Subcommittee with our views and recommendations. We have attempted to present these views in a concise and orderly fashion and have by choice eliminated much of the detail already provided by other groups.

NCSA, through its staff, is prepared to furnish additional information to your Subcommittee, or staff, to facilitate your consideration of our position as it pertains to your reviews and development of legislation.

(A brief synopsis providing general information on the Association, the industry, the product and how it is a vital ingredient in transportation and other construction endeavors appears at the end of this formal statement.)

URBAN TRANSPORTATION

When urban transportation is mentioned today, many think automatically of mass transit by rail/subway systems. These systems move people only and are totally inflexible. In all but a few major cities, highway mass transportation by buses, special lanes, car pools and pool vans is the only workable answer; the pavements for highway public transit methods can also be used to move goods and to provide essential services such as fire and police. The 1974 National Mass Transportation Act provides important monies to assist in solving this critical problem. We understand that much can be done to expedite traffic flow through improved traffic signal and other control systems—the smoother movement of traffic, of course, saves valuable fuel.

We share with many the concern regarding the needs of our public transportation systems. We believe that it is necessary to identify sources of funding for all aspects of our transportation needs. We believe it would be to the disadvantage of all concerned to wreck successful programs, such as those provided for presently by the Highway Trust Fund, to finance a multiple number of transportation systems rather than aggressively seeking funds to take care of the well defined needs in each area. We do not feel that there should be any further diversion of Highway Trust Funds from those already approved by the Congress.

NCSA recommends a step-up in these efforts to develop better public transportation on urban highways, extensive use of 1974 mass transit funds and cooperative efforts to integrate the various modes. It is very important that cost effective decisions be reached to provide the greatest return from available tax dollars.

RURAL TRANSPORTATION

Three factors point out the need for major efforts to improve our Nation's rural highways:

(1) Many of these miles are now 40 or more years old, carry far more traffic than for which they were designed and in many cases are unsafe and truly in need of major improvements.

(2) The energy and economic crises, both current and in the future, make it necessary to stress our agriculture exports in order to minimize the Nation's balance of payments; this calls for an adequate rural highway system capable of moving farm products and manufactured products to distribution centers and to U.S. ports to serve our country and the rest of the world. Planned heavy movements of coal to power plants coupled with further projected reductions in railroad track mileage, will add even greater burdens to this rural network.

(3) The recent trend of families moving away from large metropolitan areas to escape congestion and other urban problems, if continued, will put new burdens on the rural roadways at state, county, and township levels.

NCSA is in favor of an adequately funded Federal program designed to meet the needs of appropriate systems for rural roadway, bridge and safety improvements. Without a usable feeder system, the completed interstate system will be of little value.

THE INTERSTATE SYSTEM SERVING BOTH URBAN AND RURAL NEEDS

These five somewhat diverse points are worthy of special mention in connection with this National Highway System.

(1) Its completion is critical to the future economic well-being and defense of the Nation.

(2) The Interstate mileage is 1% of the Nation's total road system, it carries 20% of all traffic and is 250% as safe as other systems.

(3) A recent Gallup survey for the Highway Users Federation shows that 82% of the American people want it completed at the present or at a faster rate.

(4) Current estimates to complete the system amount to about \$32 billion and with each stretch-out, the figure goes up.

(5) Many miles are now reaching their 20 year design life. With traffic and weight levels increasing, major portions are now in need of reconstruction, as others will be in the near future.

It is our considered opinion that it is in the national interest to move ahead rapidly to complete the interstate system by closing the inter city gaps as soon as possible and to take steps to resolve or eliminate controversial sections. We support the AASHTO recommendation calling for annual interstate appropriations of \$5 billion to complete this national system as soon as possible and to help offset inflationary costs.

FEDERAL ROLE IN HIGHWAYS

Introduction

Due to the major emphasis given in the past to the Interstate System in the last twenty years, many of our state primary and secondary highways, county and local roads, city streets and bridges have deteriorated badly. Federal officials state that our highway system is wearing out 50% faster than it is being replaced. Even with our well known energy problems, all the facts and figures indicate that our Nation will continue to require better and safer roads to move people and goods, regardless of needed improvements that might be made in public transportation systems which move people only. Our street and road systems carry 90% of all passenger travel, 22% of all inter city freight and almost all of the urban freight.

The Federal-Aid Highway Program

After 60 years of cooperation between the federal government and the states, we now have a road network that is the best in the world. Since 1956, the monies collected by the federal government and allotted to the states on a reasonable formula have been generally predictable (other than recent impoundments) allowing long range planning and design for the most essential construction on our highways.

Because the Federal aid system has worked so well and because of the demonstrated needs in the future—mostly upgrading and reconstruction—of existing miles, NCSA heartily endorses the continuation of this historic Federal/State relationship.

The Highway Trust Fund

The Trust Fund concept, created by the 1956 Highway Act, has successfully provided much of the funding for the Interstate and other Federal-Aid programs. Since its inception, and because of the visible results that motorists, truckers, and the non-motoring public can see daily, only in recent years has there been opposition to this method of highway funding. The Fund is similar to others in the government, the most recent being the equally successful Airport & Airway Trust Fund.

Since the Highway Trust Fund has done the job so well, NCSA recommends that it be extended indefinitely beyond the 1977 expiration date of October 1 and with all taxes maintained at their present level. We urge no further diversion be allowed other than the specific provisions for capital outlay approved in the 1973 Highway Act.

Federal Funding

Department of Transportation studies indicate that some \$593 billion will be required to meet the highway needs through 1990—more than \$33 billion per year if we are to maintain our roadway system and meet the traffic needs that are predicted.

Recently, a great deal has been made of the question of credibility of the Administration, others in government, and business. When the Interstate and Defense Highway System Program was approved in 1956, the tax paying public supported additional taxes in order to support needed highway programs. Recent surveys have pointed out that the general public is for the completion of the Interstate System as soon as possible, as well as the need of total, safe highway systems. To use the highway tax revenues for other than the purposes approved in 1956 leads to a breach of faith with these taxpayers. If their money is not to be spent for highways, they should be so advised. If additional revenues are needed for highways or other transportation needs, the American public will support them if the reasoning is made clear. We believe that it is within the purview of this Subcommittee, and the present scope of your hearings and activities, to take major strides toward the development of a sound transportation program recognizing the needs, limitations, cost effectiveness and other benefits of the individual modes of transportation as part of a total transportation system.

At a minimum, the tax revenues going into the Highway Trust Fund should be maintained at the present level for the purposes intended. In addition, the Congress and all other concerned parties should work to identify new sources of funding to take care of both highway and other transportation needs. Since it does not in our opinion meet the needs of the country, we oppose strongly the current administration proposal, especially the 1-2-1 financing provision.

SAFETY

Improved safety on the Nation's roads, streets, and highways is, of course, of concern to each of us as private citizens. We are aware of the improved safety record on the Interstate System and urge that other primary, secondary, and local systems be upgraded to the greatest degree with spot and full length improvements such as widening, removing dangerous curves, adding shoulders, traffic control, etc.

The actual "life and death" situations that thousands face each day in crossing unsafe bridges places this phase of highway needs near the top of the ladder. One group of bridges, over 32,000, have been labeled deficient—the replacement cost for these alone is estimated at \$10.4 billion. We believe that the Federal-Aid funding for all phases of the bridge replacement and improvement program should be increased significantly to move ahead rapidly on an effort which some say is "as big a job as building the Interstate."

Prompt action must be taken to reduce the number of highway accidents. To allow maximum flexibility, a single safety program combining all safety construction improvements seems in order. Continued strong Federal leadership in this field is essential.

NATIONAL TRANSPORTATION POLICY

We believe that information presented to the Subcommittee during the course of these extensive hearings clearly points out a number of very important side of these benefits in a future program of improvement to the Nation's system of roads and streets as a major part of developing a better total transportation system.

- (1) Employment is stimulated, both direct and indirect.
- (2) Energy conservation due to smoother, safer pavements and more effective traffic control systems.
- (3) Air and noise pollution reduction due to smoother traffic flow and fewer stops and starts.
- (4) Economic benefits for business and the consumer in the more efficient movement of goods and in providing services.
- (5) Social benefits in being able to continue the American's desire to live where he chooses, to travel for vacations and to maintain family ties which are basic to our society.
- (6) Performance benefits in that highways and their components are of higher quality today due to research, improved design and quality construction. NCSA has been active for more than 50 years in our own laboratory and in working with national research and standards organizations to improve the durability and performance and life of various construction systems built both with and without crushed stone as the aggregate.

In closing, the Association believes that three factors must be kept in the spotlight as the subcommittee, the Congress and the administration work together to develop an integrated, cost effective, total transportation system:

- (1) A system to move people.
- (2) A system to move goods.
- (3) A system to provide services.

ADDENDUM

The National Crushed Stone Association members operate quarries in 36 states and produce about 70% of the total volume of crushed stone used as construction aggregate. The crushed stone industry is the largest non-fuel mining industry in the country. The 1974 U.S. Bureau of Mines Report indicates that 979 million tons of crushed and broken stone were sold in the U.S. at a value of \$1.9 billion.

The products of our industry are absolutely vital to all construction, including, of course, all types of transportation systems: Local roads and streets, highways, rapid rail transit, airports, railroads and even parts of waterway systems. Crushed stone is the major component in portland cement concrete and bituminous mixtures and is used alone as base for paving, surfacing for low-volume rural roads, railroad ballast, riprap, etc. Many other key industries—steel, glass, lead, paint, agriculture—require large quantities of stone to produce their own products.

Crushed stone is a heavy, bulky material requiring bulk transit. Approximately 90% of the crushed stone used today as construction material is shipped by truck on roads and highways, and about 8% by rail as opposed to 33% by rail in the early 50's. The balance of 1% moves by water. Because of these many uses and factors, the industry is deeply concerned with all types of construction and with all modes of transportation.

NATIONAL MILK PRODUCERS FEDERATION,
Washington, D.C., August 11, 1975.

Hon. LLOYD BENTSEN,
Chairman, Subcommittee on Transportation, Committee on Public Works, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: We would like to take this opportunity to request that the enclosed statement in behalf of the National Milk Producers Federation be made a part of the record of hearings on legislation to amend Federal highway aid programs.

Sincerely,

PATRICK B. HEALY,
Secretary.

Enclosures.

STATEMENT OF THE NATIONAL MILK PRODUCERS FEDERATION

The dairy farmers and the cooperative marketing associations represented by the National Milk Producers Federation have a very deep concern over the need to improve and maintain transportation services throughout the nation, particularly in our rural areas.

Past Federal efforts to improve the nation's highways have yielded great benefits in terms of more adequate and reliable transportation and improved safety. As significant as the advances have been, the task is far from complete. Indeed, reliable estimates by the U.S. Department of Transportation and studies by the U.S. Department of Agriculture would indicate that even greater efforts will be needed in the years ahead.

For American agriculture, this poses some very serious problems. A Senate report, "Transportation in Rural America," issued in February of this year, placed the cost of upgrading rural roads, excluding those that serve local traffic only, at \$108 billion. That study also pointed out that traffic on these roads is expected to increase by over 50 percent between now and 1990.

Besides being essential elements in maintaining and improving the quality of life in rural areas, sound road networks are essential to permit the movement of the produce of our farms and ranches to markets. In the dairy industry alone, thousands of tanker trucks call at dairy farms in every state each day to pick up milk and take it to the plants where it is packaged for fluid sale or processed into a variety of dairy products. This activity is not in the nature of a service

to the farmer. It is an essential part of his marketing operation. If it cannot be performed, promptly, the highly perishable nature of milk means that the farmer is faced with losing that production and the supply to the market will be shortened.

To a greater or lesser degree, the same situation faces all agricultural producers. The improved rural road systems we do have have been a major element in the great increase in agricultural productivity over the last 30 years. By permitting the timely and dependable delivery of needed farm inputs, by assuring the ability to move products to market, by helping to make it possible for farm families to have ready access to the markets and cultural benefits that their urban counterparts enjoy, these systems have helped to attract highly qualified people into agriculture and have assisted them in meeting their production potential.

As great as this contribution has been and in the face of the great continuing need, we must view with alarm proposals which would, in effect, dismantle the Highway Trust Fund which has served as the vehicle for much of our past progress. Secretary of Transportation Coleman has acknowledged that funds available for highway system improvements could be reduced substantially below the \$7 billion level which President Ford has said would be reached by the end of the decade under this plan. While an annual Federal outlay \$7 billion may sound like a large effort, it must be recognized that even this level would be inadequate by the estimates of officials of Secretary Coleman's Department.

The user fee concept which presently generates the funds entering the Highway Trust Fund is totally sound. Diversion of the bulk of these monies to the general fund would simply place them in the category of all public money and they would be subject to the many and shifting demands for public assistance of every sort. Highway users—whether they be the individual motorist, truck lines, or farmers moving their produce to market—have not objected to the Federal gas tax as they have been aware that these monies have been used for the specific purpose of improving the highway system. This concept would effectively be eliminated, however, and those presently providing the bulk of these funds would have no assurance that their revenue contributions would yield any benefits whatsoever in line with the cost to them.

The Federal government's responsibility for providing leadership in this area has long been recognized. The establishment of the Highway Trust Fund and the assistance provided the states through it has been an excellent example of a Federal program assisting state governments to meet what, in the truest sense, is a national problem.

To depart from a course that has proven itself effective, particularly in the face of a continuing need, would be a disservice to the nation. Nowhere is the present need for continuing this work more evident than in our rural areas.

I have already cited the estimates of needs for upgrading our rural road systems. More alarming than this estimate, however, is the statement by the Federal Highway Administrator that our highway network is deteriorating "at a rate nearly 50 percent faster than we are rebuilding it." Any move which would significantly reduce the present effort would only accelerate that alarming attrition.

Another consideration which must be in the minds of Members of Congress as they deal with this question is the fact that our rural road network may soon be called upon to bear an even greater burden. Just this week, the Final System Plan for reorganization of northeastern and midwestern railroads was submitted to Congress. As a part of that proposal, some 5,700 miles of rail trackage would be abandoned. Most of this serves rural communities. While we do not accept the judgment on which these decisions were based, if this is to be allowed, alternate modes of transport will be needed and the only available alternative is the highway.

This will mean that farmers will have to move their grain by truck farther than they presently do. Fertilizer, fuel, equipment and other farm supplies will have to be trucked farther.

We are concerned that perhaps too much of the discussion of our transportation problems has centered on urban needs. While we recognize these as problems that demand attention, the dismantling of one program that is vitally needed to meet a need in another area will simply compound the difficulties.

By any measure, the nation's agriculture has been one of the bulwarks of our economic advances in recent years. Improved transportation, primarily over better highways, has been a major factor in bringing about these advances. By

allowing these efforts to lapse, we will simply be allowing our rural road systems to slide downhill with results that will be detrimental to the entire economy.

While we share the view that a streamlining of current program efforts can be accomplished, we would strongly recommend that the Committee maintain the basic thrust of the effort that has proven so valuable over the last twenty years. The Highway Trust Fund has been the core of past efforts and can continue to meet these needs.

THE WATERWAYS JOURNAL WEEKLY,
St. Louis, Mo., August 13, 1975.

Hon. LLOYD BENTSEN,
Senator, State of Texas,
Russell Senate Office Building, Washington, D.C.

DEAR SENATOR BENTSEN: We wrote you on July 8 concerning the hearing that your Subcommittee on Transportation held on surface transportation. We appreciated a call from your office several days later inviting us to submit a statement on behalf of the inland waterways industry. We directed this message to some of the organizations in Washington that represent the waterways industry and, hopefully, they did send in some comments.

We noted in the St. Louis Post-Dispatch of July 31, the comments about mass transportation by Dr. Barry Commoner, of Washington University in St. Louis. We should like to comment on what he said, either for the record or to the Subcommittee for whatever use it wishes to make of the material.

We believe that Dr. Commoner is incorrect in his comments that "railroads are by far the most productive mode of transportation for freight." Studies have been made by the Department of Transportation and other agencies showing that water transportation is the most efficient in the use of energy. Independent studies have been made and have been proven inaccurate on this matter of energy, and we assume that Dr. Commoner used one of these reports in his testimony.

I have been working with the Transportation Task Force of the East-West Gateway Coordinating Council in St. Louis for several years, and our task force has found no indication whatsoever that people in the area would rather travel by mass transit than by automobile. The state of the bus transit system in the St. Louis area is proof of this. Also, we certainly do not believe Dr. Commoner's statement that "most people would prefer to walk to the store rather than drive."

We would appreciate your consideration of this letter.

Respectfully,

JAMES V. SWIFT,
Vice-President.



